

Wisconsin's Off-Road Fuel-Tax Collection Process: A Midwestern Comparative Analysis and Assessment

Final Report
SPR 0092-02-08

Principal Investigator:
Robert J. Eger III, Ph.D.
Department of Political Science
University of Wisconsin-Milwaukee

Submitted to the Wisconsin Department of Transportation
October 2002

Acknowledgement

This project was supported through the Wisconsin Council on Research of the Wisconsin Department of Transportation and the Federal Highway Administration, under project sponsorship by SPR.

We thank and acknowledge the special efforts of Allyn Lepeska, Assistant General Counsel, Office of General Counsel, Wisconsin Department of Transportation who took on the laborious task of project manager for this report. We thank the members of our technical oversight committee including Robert Jensen, Linda Keegan, Dwight McComb, Joshua Peacock, and Thomas Rabaglia. We would like to acknowledge the special assistance of both Robert Jensen and John Nordlie of the Wisconsin Department of Revenue whose guidance and assistance were greatly appreciated.

We acknowledge the special assistance of Marsha Reynolds, Ralph Erickson and Tom Howard, Chief of Highway Funding and Motor Fuels, Office of Highway Policy Information for the Federal Highway Administration.

The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views of the Wisconsin Department of Transportation or the Federal Highway Administration at the time of publication. This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof. This report does not constitute a standard, specification or regulation. The United States Government does not endorse products or manufacturers. Trade and manufacturers' names appear in this report only because they are considered essential to the object of the document.

Wisconsin's Off-Road Fuel-Tax Collection Process: A Midwestern Comparative Analysis and Assessment

**Research Report
SPR 0092-02-08**

**Wisconsin's Off-Road Fuel-Tax Collection Process:
A Midwestern Comparative Analysis and Assessment**

By

Robert J. Eger III, Ph.D.

Deborah A. Knudson

Justin Marlowe

Amy Klemm Verbos

University of Wisconsin-Milwaukee
College of Letters and Science
Department of Political Science
Master of Public Administration Program
Milwaukee, Wisconsin

In cooperation with
Wisconsin Council on Research
Wisconsin Department of Transportation
Federal Highway Administration

The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views of the Wisconsin Department of Transportation or the Federal Highway Administration at the time of publication.

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof. This report does not constitute a standard, specification, or regulation.

The United States Government does not endorse products or manufacturers. Trade and manufacturers' names appear in this report only because they are considered essential to the object of the document.

October 2002

Technical Report Documentation Page

1. Report No.	2. Government Accession No	3. Recipient's Catalog No	
4. Title and Subtitle Wisconsin's Off-Road Fuel-Tax Collection Process: A Midwestern Comparative Analysis and Assessment		5. Report Date October 2002	
		6. Performing Organization Code	
7. Authors Robert J. Eger III, Ph.D., Deborah A. Knudson, Justin Marlowe and Amy Klemm Verbos		8. Performing Organization Report No.	
9. Performing Organization Name and Address University of Wisconsin-Milwaukee College of Letters and Science Department of Political Science Master of Public Administration Program Milwaukee, Wisconsin 53201		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. SPR 0092-02-08	
12. Sponsoring Agency Name and Address Wisconsin Department of Transportation 4802 Sheboygan Avenue Madison, WI 53707-7910		13. Type of Report and Period Covered Final Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract Over the past several years, governments around the country have engaged in a variety of new efforts to curb motor fuels tax evasion. Unlike the income tax, which is typically evaded through simple reporting error or other manipulation, motor fuels tax evasion often occurs because potential evaders are able to exploit the complexity of its audit, collection, and exemption processes. Estimates of annual revenue losses related to this sort of evasion are substantial, ranging from \$1.5 billion to \$2.5 billion. This paper specifically examines the potential for evasion that results from the fuel tax exemptions that Wisconsin provides for various "off-road" uses. The findings of this study offer a series of policy options to improve the enforcement of Wisconsin's Motor Vehicle Fuel Tax law.			
17. Key Words Motor Fuels Tax, Tax evasion, Tax exemptions, Off-Road Fuel Uses		18. Distribution Statement No restriction. This document is available to the public through the National Technical Information Service 5285 Port Royal Road Springfield VA 22161	
18. Security Classif.(of this report) Unclassified	19. Security Classif. (of this page) Unclassified	20. No. of Pages 71	21. Price

Form DOT F 1700.7 (8-72) Reproduction of completed page authorized.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	8
■ PROJECT SUMMARY	8
■ BACKGROUND.....	8
■ FINDINGS AND CONCLUSIONS.....	9
■ RECOMMENDATIONS FOR FURTHER ACTION.....	10
INTRODUCTION.....	13
■ STUDY PURPOSE.....	13
■ STUDY DESIGN AND ORGANIZATION.....	13
TAX EVASION BACKGROUND INFORMATION.....	15
■ INTRODUCTION.....	15
■ PREVIOUS RESEARCH ON TAX EVASION.....	15
■ HOW MOTOR FUEL TAXES ARE EVADED	16
■ HOW GOVERNMENTS HAVE RESPONDED.....	17
ESTIMATED REVENUE LOSSES	19
■ METHODOLOGY	19
■ AGRICULTURE OFF-HIGHWAY ESTIMATES	23
■ INDUSTRIAL OFF-HIGHWAY ESTIMATES	25
■ MARINE OFF-HIGHWAY ESTIMATES	27
MOTOR FUEL TAX STATUTES AND DESCRIPTIONS.....	29
■ WISCONSIN.....	29
■ COMPARISON WITH BORDER STATES	29
■ COMPARISON WITH OTHER MIDWESTERN STATES.....	30
STATUTORY EXEMPTIONS FOR OFF-ROAD USAGE	32
■ WISCONSIN.....	32
■ COMPARISON WITH BORDER STATES	33
■ COMPARISON WITH OTHER MIDWESTERN STATES.....	34

PROCESSES FOR CLAIMING	36
OFF-ROAD EXEMPTION FOR UNDYED FUEL	36
■ WISCONSIN LAW	36
■ COMPARISON WITH BORDER STATES	38
■ COMPARISON WITH OTHER MIDWESTERN STATES.....	38
ENFORCEMENT PENALTIES FOR.....	40
FALSE OR FRAUDULENT EXEMPTION CLAIMS....	40
■ WISCONSIN LAW	40
■ COMPARISON WITH BORDER STATES	41
■ COMPARISON WITH OTHER MIDWESTERN STATES.....	41
■ WISCONSIN LAW	42
■ COMPARISON WITH BORDER STATES	42
■ COMPARISON WITH OTHER MIDWESTERN STATES.....	43
AUDITING STATUTES AND PROCESSES	44
■ WISCONSIN.....	44
■ COMPARISON WITH BORDER STATES	44
■ COMPARISON WITH OTHER MIDWESTERN STATES.....	44
POLICY OPTIONS FOR REDUCING EVASION AND	45
INCREASING FUEL TAX COLLECTION.....	45
■ REDUCING EVASION	45
■ INCREASING FUEL TAX COLLECTION.....	46
SUMMARY AND CONCLUSIONS.....	48
APPENDIX A.....	50
APPENDIX B	57

Executive Summary

■ Project Summary

Over the past several years, governments around the country have engaged in a variety of new efforts to reduce motor fuels tax evasion. Unlike the income tax, which is typically evaded through simple reporting error or other manipulation, motor fuels tax evasion often occurs because potential evaders are able to exploit the complexity of its audit, collection, and exemption processes. The collection of Wisconsin's road fund taxes and revenues involves a complex process of assessment, collection, auditing, and enforcement actions by federal, state, and local government officials and agencies. This process complexity increases the opportunities for tax and revenue evasion and inefficiencies in the revenue collection process. The collection process is further exacerbated by off-road user exemptions and processing changes, which impact Wisconsin and its ability to effectively collect its road fund taxes and revenues. This study focuses on the problem of road fund revenue complexity resulting from the involvement of off-road usage in the assessment, collection, auditing, and enforcement of Wisconsin's road fund revenue and tax laws.

This report specifically examines the potential for evasion that results from the fuel tax exemptions that Wisconsin provides for various "off-road" uses. The analysis proceeds with three themes. It begins with a statistical analysis of recent tax-exempt fuel consumption and rebate figures for all Midwestern states. These results indicate that Wisconsin consumes significantly higher quantities of tax-exempt fuel for off-road agricultural purposes when compared with other states throughout the Midwest. The second theme incorporates a comparative analysis of Wisconsin's Motor Vehicle Fuel Tax law, and the equivalent laws throughout the Midwest. The results provide statistical and legal-analytical evidence that Wisconsin's current law is vulnerable to numerous types of evasion. With these findings in mind, the third theme focuses on a series of policy options to improve the enforcement of Wisconsin's Motor Vehicle Fuel Tax law.

■ Background

Most of the previous research on tax evasion, and the policy options that stem from it, are specific to the income tax. However, the progress that researchers and policymakers have made in reducing income tax evasion has led to a number of similar efforts to estimate evasion losses and improve collections in other tax areas, including the motor fuels tax. In particular, the Federal Highway Administration, the Council of State Governments, and a handful of university researchers have become very interested in this often overlooked, but critical revenue source that has seen substantial losses due to fuel tax evasion. A 1992 Federal Highway Administration study, for example, estimated combined annual federal losses of \$1.3 billion, and state fuel tax losses of nearly \$1.2 billion.¹ A similar study conducted by the Council of State Governments estimated

¹ Federal Highway Administration (1999). *Motor Fuel Tax Evasion Summary*. Available online at <http://fhwa.dot.gov/policy/summ.htm>.

losses of between \$952 million and \$1.5 billion.² Since these estimates first appeared, attention has now shifted toward identifying the sources of evasion, and making necessary changes to administrative processes, enforcement procedures, and governing statutes. The Federal Highway Administration continues to examine the issue, emphasizing problems that allow for evasion as well as successes realized through increased enforcement. Those changes, which are described in more detail in this report, have resulted in an estimated \$10 to \$18 in new revenue for every dollar spent on new enforcement efforts.³ A number of states, including many of Wisconsin's neighbors, have also enjoyed tremendous success in reforming their state fuel tax enforcement procedures. This report also describes their efforts.

■ Process

In order to understand and estimate the prevalence of evasion and its contributing effect on Highway Trust Fund (HTF) apportionment, this report begins with a statistical analysis of tax-exempt fuel consumption trends for each Midwestern state. Data that each state is required to provide to the Federal Highway Administration (FHWA) on the form 551M was collected to offer an accurate assessment of off-highway refunds. This data provides an opportunity to compare states' off-highway fuel refunds, which is the gallons of non-taxed gasoline by month. The comparison group used in this analysis is the Midwestern states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Ohio, and Wisconsin.

A series of analyses at two levels is provided to address the comparison of off-highway refunds in gasoline. First, monthly data from the time period 1994 through 2000 was analyzed to compare Wisconsin gasoline refunds to the Midwestern states and the four border states of Illinois, Iowa, Michigan, and Minnesota. The second analysis combines the monthly data for the time period 1994 through 2000 into annual data for the same type of comparison. Multiple methodologies were used in the initial analyses. Since the analyzed data were collected over multiple time periods and multiple cross-sectional units (states), the data are commonly referred to as time series cross-sectional (TSCS) data or panel data. Analyses of this type of data are generally complicated by a number of factors. Given these considerations, a series of methodological procedures were used to account for the data complexity. The analysis presented in the report offers a final set of estimates after the methodological issues were addressed.

■ Findings and Conclusions

The analysis indicates that Wisconsin's annual consumption of tax-exempt fuel for agricultural uses exceeds that of other Midwestern states by nearly \$4,000,000. Given that the analysis controls for the number of farms, total acreage, tax rates, and other state-by-state factors, these results indicate that Wisconsin consumers use and claim rebates on

² Council of State Governments and the Council for Governor's Policy Advisors (1996). *Road Fund Tax Evasion: A State Perspective*. Council of State Governments: Lexington, KY.

³ S. Baluch (1996). "Revenue Enhancement Through Increased Motor Fuel Tax Enforcement" (electronic version). Paper presented at the 1996 Annual Meeting of the Transportation Research Board.

fuel at rates substantially higher than other Midwestern states. This finding implies that evasion is likely occurring, given that no other factors can account for these high rates. In addition, the same analysis reveals that Wisconsin consumes and rebates more tax-exempt fuel for industrial uses than other Midwestern states annually. By contrast, marine gasoline usage is average compared to the other Midwestern states. These results underscore the importance of examining Wisconsin's current statutes, collections, and exemption processes for the motor fuels tax.

In general, the analysis indicates that Wisconsin's law and processes facilitate exemptions for a variety of reasons. No tax is imposed or collected from the user on most exempt transactions. There is no presumption favoring taxation. The person claiming the exemption provides an exemption certificate to the supplier or vendor, who is then entitled to a deduction or refund for the exempt fuel sold. If the purchaser pays the fuel tax, they are legally entitled to a refund. Under this approach, the state bears a greater burden to seek out tax evaders and collect the tax. The legal burden of proof falls on the state to show that the fuel was used for a taxable purpose rather than on the purchaser to show that it was used for an exempt purpose. In addition, the burden is on the state to locate the person from whom tax is owed and to collect it. In the case of fraudulent exemption certificates, this could prove difficult.

■ Recommendations For Further Action

The results of this report indicate that there are a number of opportunities to reduce evasion and increase fuel tax collections through improvements to Wisconsin law concerning off-road fuel tax exemptions. These changes do not affect the substantive policy assessment of what uses should or should not be exempt. Each of the policy options has been implemented in one or more Border States or Other Midwestern States. Through a combination of these policy options, Wisconsin can bring greater efficiency to its fuel tax policies. A number of policy options to change the law, process and/or procedure to reduce evasion of motor vehicle fuel tax are proposed for the State of Wisconsin. These policy recommendations follow actual policies implemented by the Midwestern states. The first policy option is offered along with analytical assumptions and revenue estimations of its impact. The remaining policy options have been implemented in the Midwestern states as enhancements to their existing refund policies. However, revenue estimations of the impacts of these policy options cannot be estimated because of the short length of time the policies have been in effect and the unavailability of data for analysis.

Policy Option #1

Consider creating a statutory presumption that motor vehicle fuel will be used or consumed by motor vehicles operating on the roads of the state. An example of this policy option is the *1998 Minnesota Session Laws, Chapter 299*. Using the experiences of Minnesota as a basis for comparison, the monetary impact of implementing this policy can be estimated under the following assumptions:

- Legislative change, tax rates, average acreage and the number of farms are the only factors that impact agricultural gasoline refunds.
- Legislative change, tax rates, and industrial value are the only factors that impact industrial gasoline refunds.
- A constant positive demand for gasoline annually.
- Implements, such as farm equipment and industrial equipment, are similar among the Midwestern states regardless of the year.
- The 1994-2000 annual gasoline demand/supply relationship is representative of any other time period.

Under these assumptions, the following revenue estimates are offered for this policy option:

- Annual agricultural gasoline refunds – If Wisconsin became equal to the average of the other Midwestern states in agricultural gasoline refunds, Wisconsin could realize a maximum total additional estimated revenue in the range of \$4,015,232 - \$4,214,876. If Wisconsin became similar to its border state of Minnesota in agricultural gasoline refunds, which is lower than the average of the other Midwestern states, Wisconsin could realize a maximum of \$682,843 in revenue beyond the amount realized by becoming equal to the average.
- Annual industrial gasoline refunds - If Wisconsin became similar to Minnesota, the estimated impact would be an approximate 13.44% to 13.55% reduction in industrial refunds, which would yield maximum realized additional revenue of \$20,380 - \$20,547 annually.

Other Policy Options

- Consider closing the loophole that permits the purchase of dyed diesel fuel by operators of out-of-state boats and recreational boats not entitled to a refund.
- Consider a refund permit process or income tax credit for exempt uses rather than exemption certificates.
- Collect sufficient additional information from claimants to facilitate audit, inspection, collection and enforcement.
- Require an offset to any refund or tax credit for any applicable income tax owed to the state.
- Deduct applicable sales or use tax from any refund or credit.

- Change the “knowing violation” of misuse of dyed diesel fuel to proof of misuse of dyed diesel fuel.
- Consider enhancing criminal penalties for violations, such as making fuel tax evasion a felony.
- Consider enhancing civil penalties for violations, with larger fines for repeat violators.
- Consider a specific fine for refusal to permit an inspection or audit, and severe penalties for failure to keep required records.

Introduction

■ Study Purpose

The collection of Wisconsin's road fund taxes and revenues involves a complex process of assessment, collection, auditing, and enforcement actions by federal, state, and local government officials and agencies. This process complexity increases the opportunities for tax and revenue evasion and inefficiencies in the revenue collection process. The collection process is further exacerbated by off-road user exemptions and processing changes, which impact Wisconsin and its ability to effectively collect its road fund taxes and revenues. This study focuses on the problem of road fund revenue complexity resulting from the involvement of off-road and road users in the assessment, collection, auditing, and enforcement of Wisconsin's road fund revenue and tax laws. This report specifically examines the potential for evasion that results from the fuel tax exemptions that Wisconsin provides for various off-road uses. The results of this study will provide state departments, such as Transportation and Revenue, a series of recommendations for changing the law, processes and/or procedures to reduce evasion of motor vehicle fuel tax.

■ Study Design and Organization

The research design associated with this project focuses on four principle efforts. These efforts are as follows:

- Analyze current off-road user-related processes and procedures to identify potential areas for process and policy enhancement.
- Analyze current audit processes and procedures of off-road user exemptions in the Transportation and Revenue departments.
- Analyze audit and collection procedures of Midwestern states bordering Wisconsin to identify process that might be adopted by Wisconsin to enhance its audit-related processes of off-road users.
- Analyze and assess collection-related strategy options for adaptability in Wisconsin and the implications of changing the current systems.

The following report provides a detailed description of each step of the study. Chapter two provides background information on tax evasion. This information includes a discussion of previous research on tax evasion in general and motor fuel tax evasion in particular. Chapter three provides the estimated revenue losses resulting from the discovery of likely motor fuel tax evasion occurring in Wisconsin. The chapter begins with a statistical analysis of recent tax-exempt fuel consumption and rebate figures for all Midwestern states. These results indicate that Wisconsin consumes significantly higher

quantities of tax-exempt fuel for off-road agricultural purposes when compared with other states throughout the Midwest. Chapter four consists of a comparative analysis of Wisconsin's Motor Vehicle Fuel Tax law, and the equivalent laws throughout the Midwest. The particular focus of chapter four is a comparison of the motor fuel tax statutes and descriptions. Chapter five provides a comparison of the statutory exemptions for off-road usage. Chapter six compares the processes for claiming off-road exemption for undyed fuel. Chapter seven describes the enforcement penalties for false or fraudulent exemption claims. Chapter eight discusses the uses and penalties for misuse of dyed diesel. Chapter nine provides a comparison of auditing statutes and processes. The results of chapters three through nine provide statistical and legal-analytical evidence that Wisconsin's current law is vulnerable to numerous types of evasion. With these findings in mind, chapter ten presents a series of policy options to improve the enforcement of Wisconsin's Motor Vehicle Fuel Tax law. Finally, chapter eleven offers conclusions and recommendations.

Tax Evasion Background Information

■ Introduction

The issue of tax evasion has received a steady stream of attention from researchers in a variety of fields including business, criminal justice, economics, political science, psychology, and many others. At the present, a great deal is known about several aspects of evasion, including the motives that drive the choice to evade, the process by which it occurs, the role of criminal sanctions in preventing it, and many other aspects of this complicated phenomenon.⁴ However, it is only within the past several years that analysts have attempted to translate that knowledge into actual legislative and administrative policy options.

■ Previous Research on Tax Evasion

Most of the previous research, and the policy options that stem from it, are specific to the income tax. Those options fall into three broad categories including 1) increases in auditing resources, 2) legislative changes, or 3) efforts to enhance public commitment to compliance.⁵ According to a generation of tax compliance research, auditors play a critical role in deterring noncompliance because the threat of an audit compels the taxpayer to accurately report their income. As a result, increases in the number of auditors, as well as their overall visibility, are believed to prevent evasion.⁶ Another potential source of widespread evasion is commercial tax preparers, who are presented with innumerable opportunities for error, fraud, and evasion. A perennial option for addressing evasion, as a result, is to more closely regulate and monitor their activities. More recent work has examined the impact of “normative appeals” on compliance. An appeal of this sort was tested in Minnesota, where a random sample of taxpayers were sent a letter describing the critical importance of tax revenue “to the general welfare.” Compliance levels were proven higher among those taxpayers who received the letter, lending support to the idea that public commitment also plays an important role in preventing evasion.⁷ Taken as a whole, approaches of this sort have the potential to improve income tax compliance across the country. Perhaps more importantly, they

⁴ Several works take this same multi-disciplinary approach, but the often-cited classic work is Joel Slemrod, ed. (1992), *Why People Pay Taxes: Tax Compliance and Enforcement* (Ann Arbor: University of Michigan Press).

⁵ Many of these options were articulated in Danny Nagin (1990), “Policy Options for Combating Tax Noncompliance.” *Journal of Policy Analysis and Management* 9(1): 7-22.

⁶ In Michigan, for instance, the Department of Revenue has rented several large roadside billboards carrying messages such as “Tax evaders do time.” Specifically regarding fuel taxes, the state has placed large, visible stickers carrying the same message on gas pumps in an attempt to remind consumers “at the pump.”

⁷ For more detail on this experiment, see Marsha Blumenthal, Charles Christian, and Joel Slemrod (2001). “Do Normative Appeals Affect Tax Compliance? Evidence from a Controlled Experiment in Minnesota.” *National Tax Journal* 54(1): 125-36.

illustrate how the knowledge gained from quality research be parlayed into effective policy options.

The progress that researchers and policymakers have made in reducing income tax evasion has led to a number of similar efforts to estimate evasion losses and improve collections in other tax areas, including the motor fuel tax. In particular, the Federal Highway Administration, the Council of State Governments, and a handful of university researchers have become very interested in this often overlooked, but critical revenue source. At the moment, it is evident that fuel tax losses due to evasion are substantial. A 1992 Federal Highway Administration study, for example, estimated combined annual federal losses of \$1.3 billion, and state fuel tax losses of nearly \$1.2 billion.⁸ A similar study conducted by the Council of State Governments estimated losses of between \$952 million and \$1.5 billion.⁹ Since these estimates first appeared, attention has now shifted toward identifying the sources of evasion, and making necessary changes to administrative processes, enforcement procedures, and governing statutes. The Federal Highway Administration continues to examine the issue, emphasizing problems that allow for evasion as well as successes realized through increased enforcement. Those changes, which are described here in more detail, have resulted in an estimated \$10 to \$18 in new revenue for every dollar spent on new enforcement efforts.¹⁰ A number of states, including many of Wisconsin's neighbors, have also enjoyed tremendous success in reforming their state fuel tax enforcement procedures. This report also describes their efforts.

■ How Motor Fuel Taxes Are Evaded

The process of collecting motor fuel taxes is among the most complicated of any tax, and is subject to evasion for primarily three reasons. First, it is difficult to determine an exact "point of sale." In the process of traveling from the refinery to individual consumers, motor fuels are repeatedly bought and sold through a complicated network of wholesalers, distributors, and retailers that spans the entire country. As a result, determining the individuals or firms responsible for paying these taxes can be a difficult task. A 1992 study by the Federal Highway Administration points out that some criminals have effectively exploited this complexity through "daisy chaining," in which evaders conceal the party liable for paying taxes by transferring fuel among fictitious companies. The same report also discusses the losses that result from "bootlegging," in which evaders purchase fuel in low-tax states, sell it in states with higher fuel taxes, and then pocket the difference between the two tax rates.¹¹ This same distribution chain also allows retailers and wholesalers to "blend" or "cocktail" motor fuels by diluting them with various combustible waste products, taxing consumers on the full volume of sales,

⁸ Federal Highway Administration (1999). *Motor Fuel Tax Evasion Summary*. Available online at <http://fhwa.dot.gov/policy/summ.htm>.

⁹ Council of State Governments and the Council for Governor's Policy Advisors (1996). *Road Fund Tax Evasion: A State Perspective*. Council of State Governments: Lexington, KY.

¹⁰ S. Baluch (1996). "Revenue Enhancement Through Increased Motor Fuel Tax Enforcement" (electronic version). Paper presented at the 1996 Annual Meeting of the Transportation Research Board.

¹¹ Federal Highway Administration (1992). *Fuel Tax Evasion*. U.S. Department of Transportation Report No. FHWA-PL-92-028.

and keeping the excess tax.¹² As long as the distribution process involves multiple parties, there will always be potential for evasion.

Fuel taxes are also evaded because the retailers responsible for paying them often misreport tax liability. Like sales and other excise taxes, fuel tax liability is calculated based on self-reported information, which in this case includes the amount of taxable fuel sold, sale prices, taxes assessed on consumers, etc. As a result, retailers are able to evade by not filing required fuel tax forms, reporting incorrect information about prices and quantities of fuel sold, or simply neglecting to pay altogether.

A third major source of evasion, and one of the focus areas of this study, is the exemptions that the federal government and several state governments provide for off-road fuel use. These exemptions are widely utilized by consumers in agriculture, construction, marine recreation, and several other industries where gasoline is used to transport necessary implements, but not directly used for commercial purposes.¹³ However, there exists little or no regulatory capacity to monitor actual fuel use, and it is often illegally used for on-road purposes as a result. Effective administration of this tax is further complicated due to the fact that these exemptions are self-claimed and self-reported. As such, consumers are often able to make false claims and misreport information about exempt fuel use with little interference from state auditors.

■ How Governments Have Responded

Thus, with the increased awareness and concern over fuel tax evasion, both the federal and state governments have taken a number of actions. To date, the federal effort has consisted mostly of new collaborations among government agencies, new and aggressive enforcement measures, and enhanced resources to fight evasion. Since FY 1990, FHWA has provided funding to supplement state governmental and IRS fuel tax enforcement resources under the auspices of the Joint Federal/State Motor Fuel Tax Compliance Project, or Joint Project for short. The Joint Project Steering Committee is co-chaired by FHWA and the IRS, and is composed of representatives from the revenue agencies of nine lead States, the Department of Transportation's Office of Inspector General, the Department of Justice, the FBI, and various industry groups who serve as committee advisors. Currently, 49 states and the District of Columbia participate in the joint project, meeting on a regular basis to exchange information, plan strategy, and organize cooperative enforcement efforts. In another joint effort that began in 1986, the Internal Revenue Service (IRS) and FHWA have worked cooperatively to reduce fuel tax evasion by supporting changes in tax collection procedures and additional enforcement resources. In particular, IRS has promulgated an interagency agreement with FHWA to distribute

¹² This process is described in Dwight Denison and Merl Hackbart (1996). *The Motor Fuels Tax Evasion Issue in Kentucky*. Research Report KTC-96-16. Kentucky Transportation Center, University of Kentucky: Lexington, KY.

¹³ Dwight Denison and Robert J. Eger, III (2000). "Tax Evasion from a Policy Perspective: The Case of the Motor Fuels Tax." *Public Administration Review* 60(2): 173-182. Also see Dwight Denison and Merl Hackbart (1996). *The Motor Fuels Tax Evasion Issue in Kentucky*. Research Report KTC-96-16. Kentucky Transportation Center, University of Kentucky: Lexington, KY.

nearly \$7 million in IRS funds to states willing to conduct roadside diesel fuel inspections on its behalf.

In addition to these collaborations, two comprehensive legislative acts passed since these initial efforts have included substantial new funding for new motor fuel tax enforcement efforts. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) provided \$5 million annually through 1997 in Highway Trust Fund (HTF) contract authority for the Joint Project. Of the \$5 million, \$3 million is allocated to the States for participation in regional motor fuel tax enforcement task forces and \$2 million is provided to the IRS to supplement its fuel tax enforcement efforts. In addition, the Omnibus Budget Reconciliation Act of 1993 required that diesel fuel, on which Federal tax was not paid, be dyed to differentiate it from taxed fuel. In one of the largest coordinated enforcement efforts, over 16,000 trucks were checked for illegal use of dyed fuel in January 1995 under Operation Red Alert, covering 21 States. Over \$200,000 in penalties was proposed in this operation. HTF revenue (net of recent tax rate increases) has increased substantially since the changes in the Federal diesel fuel excise tax became effective January 1, 1994. In 1994, the HTF revenue from diesel fuel tax was up over \$1 billion compared to 1993, with as much as \$700 million of the increase attributed to improved compliance.¹⁴

Many state governments, particularly in the Southern region, have implemented similar reform efforts with great success. These initiatives include 1) moving the point at which the fuel tax is collected from the dealer to the rack; 2) changing the criminal penalty associated with motor-fuel tax from a misdemeanor to a felony; 3) adopting legislation that holds corporate officers personally liable for fuel tax submission and payment; and 4) implementing a dyed fuel program similar to that used by the federal government.¹⁵

Therefore, the combined federal and state government experience with fuel tax administrative reform provides state policymakers with a number of proven effective policy options to address fuel tax evasion. Keeping in mind these previous efforts, this analysis reviews the Wisconsin Motor Vehicle Fuel Tax Law exemptions for off-road uses, reporting requirements, processes and procedures for claiming the exemptions, auditing processes, and penalties imposed for violations relative to the exemptions. Wisconsin's approach to off-road motor vehicle fuel tax exemptions with the law, processes, procedures and penalties was compared to its "Border States" (i.e., Illinois, Iowa, Michigan, and Minnesota), and with selected "Other Midwestern States" (Indiana, Kansas, Missouri, Nebraska and Ohio).

¹⁴ Federal Highway Administration (1999), *ibid*.

¹⁵ These options are discussed in greater detail in Denison and Eger (2000), *ibid*.

Estimated Revenue Losses

■ Methodology

State-by-State tax contributions to the Federal Highway Trust Fund (HTF) cannot be directly measured, thus other procedures have been developed to attribute on-highway fuel usage. These procedures are then used to apportion¹⁶ Federal funds back to the States. A critical factor in the procedure developed by the Federal Highway Administration (FHWA) is that correct State data and precise attribution procedures are in place within the States. These State procedures are extremely important because apportionments for some highway programs use the percentages of revenues attributed to each State as factors. Moreover, legislation from the Transportation Equity Act for the 21st Century (TEA-21) increased significantly the amount of Federal apportionments that rely on the motor-fuel/HTF attribution process and factors. As an example, under the current attribution process, more than \$12 billion are apportioned annually to the States in TEA-21 Federal apportionments, compared to less than \$2 billion annually under preceding legislation. Also, all the States receive Federal apportionments through this process while under previous legislation only about 20 States did.

The process begins when States provide consumption and tax data to the FHWA on gallons of gas, gasohol, on-highway diesel, on-highway liquefied petroleum gas, and other alternative fuels that were consumed in the State. The form utilized in this process is Federal form 551M. Because State tax data are collected and organized to administer State programs, the fuel usage data sets submitted to FHWA from the States differ, sometimes significantly.

To develop a complete and reasonably consistent data set across all States, FHWA adjusts the State motor fuel data. These adjustments are necessary, for example, to account for public use of gasoline and special fuels (e.g., State laws differ for government use of gasoline and government use of diesel fuel), gasoline losses, fuel types (e.g., gasoline, gasohol at various percentages, special fuels), tax rates (e.g., fully taxed fuels, exempt sales, partially exempt sales, full and partial refunds, and fuels taxed at reduced rates), and off-highway fuel use.

The end result of this process is a set of tables that attribute on-highway motor fuel usage, by fuel type, to States. The Federal-aid highway apportionment process uses the revenue and fuel volume data to distribute HTF program funds in four categories: the Surface Transportation Program, Interstate Maintenance, National Highway System, and the Minimum Guarantee.

An important aspect to correct apportionment of HTF to the States is the fuel volume data. Fuel volume data is affected by the amount of fuel used in an off-highway capacity.

¹⁶ Apportionment is the distribution of funds by statutory formula. Apportionment of funds to the States for four major highway programs is based on factors from the fuel usage attribution process.

To analyze current off-highway user-related processes and procedures of gasoline fuel, and its contributing effect on HTF apportionment, this section provides estimates of the impact of off-highway gasoline refunds. To provide an accurate assessment of off-highway refunds, data provided by each state to the FHWA on form 551M was collected. This data provides an opportunity to compare states off-highway fuel refunds, which is the gallons of non-taxed gasoline by month. The comparison group used in this analysis is the Midwestern states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. Prior research has shown that the Midwestern states have a certain degree of uniformity for fuel taxation, as the standard deviation for this region is comparatively small.¹⁷

To address the comparison of off-highway refunds in gasoline, a series of analyses are provided at two levels. First, monthly data from the time period 1994 through 2000 was used. This analysis compares Wisconsin gasoline refunds to the Midwestern states and the four border states of Illinois, Iowa, Michigan, and Minnesota. This analysis breaks down refunds into the categories of agriculture refunds, and industrial refunds. The monthly data is seasonalized for comparative purposes. The second analysis combines the monthly data for the time period 1994 through 2000, prior to seasonalization, into annual data. The categories include agriculture and industrial.

For the marine estimates, the data provided on the 551M forms is incomplete for the Midwestern states. To evaluate the use of marine gasoline, the data provided by FHWA in their Highway Statistics Series for the years 1995-2000 was used. The year 1994 is not included since the number of registered and unregistered boats for that period is not available.

The analysis begins with a description of the variables used in the two analyses. Table 1 provides the name and description of the variables used in the analysis. The first analysis estimates the effect that the monthly fuel tax rate (Fuel tax), average farm acreage (Acreage) and the monthly number of farms (Farm) have on agriculture refunds for the eighty-four month period 1994-2000. To estimate the effect of Minnesota's legislative change in 1998, two dummy variables were coded in, Minnesota before 1998 and Minnesota after 1998. To assess Wisconsin's agriculture gasoline refunds as compared to the other Midwestern states, the dummy variable Wisconsin was coded in. Variables for the remaining states that border Wisconsin: Illinois, Iowa, and Michigan were then coded in. To assess the impact of Missouri's off-highway legislation, the variable Missouri was coded in the analysis.

The analysis began with a statistical tool known as Ordinary Least Squares (OLS) regression. When used appropriately, a regression analysis provides information about the associations, or correlations, among the variables under examination. In the case of these data, the primary interest is in how the independent variables such as fuel tax rates, acreage, number of farms, etc. impact the dependent variable, total gasoline tax refunds. Correlations take essentially two forms.

¹⁷ Dwight V. Denison, Robert J. Eger III and Merl M. Hackbart (2001). "Cheating our State Highways: Methods, Estimates, and Policy Implications of Fuel Tax Evasion." *Transportation Quarterly* 54(2): 47-58.

Table 1: Variables Used in the Analyses
Monthly Analysis Variables
Agrimonth – Seasonalized monthly agricultural gasoline refunds in dollars
Fuel tax – Monthly fuel tax rate in cents
Farm – Monthly number of farms in state
Acreage – Average acreage of farms
Industmonth – Seasonalized monthly industrial gasoline refunds in dollars
Indusval – Monthly industrial value in thousands of dollars
Annual Analysis Variables
Agriculture – Annual agricultural gasoline refunds in thousands of dollars
Fuel tax – Annual fuel tax rate in cents
Farms – Annual number of farms in state
Acreage – Average acreage of farms
Industrial – Annual gasoline industrial refunds in thousands of dollars
Indusvalue – Annual industrial value in thousands of dollars
Marine – Estimated Annual gasoline usage in marine in thousands of dollars
Boats – The natural log of the number of registered and unregistered boats
Wcommerce – Number of water trips per year

“Positive” correlations are those in which the values of both variables increase simultaneously. For example, marine fuel use is likely to increase when the number of marine recreational trips increases during the summer months. Correlations can also be “inverse” when the value of one variable increases while the value of another decreases. For instance, it might be expected that the amount of fuel used decreases when the fuel tax rate increases. The product of any regression analysis, including this one, is a series of “correlation coefficients” which describe the strength of the associations between a series of variables while taking into account other factors. From these correlation coefficients, inferences about the relationships between variables can be drawn.

In addition, and particularly important for this analysis, those same correlation coefficients can also be used to estimate the value of the dependent variable based on its association with the independent variables. That is precisely what is happening in this analysis. The estimates reported herein have been derived using these analytical techniques.

In order for a regression analysis to be conducted properly, the data used to conduct the analysis must meet certain conditions, which are described below. If those conditions are not met, a number of statistical adjustments can be made to assure that the estimates being produced by the analysis are reasonable. In most cases, regression analyses require the use of some sort of statistical correction procedure.

The data that is used in this analysis, which were collected over multiple time periods and multiple cross-sectional units (states), are commonly referred to as time series cross-sectional (TSCS) data or panel data. TSCS data challenge several of the conditions for a regression analysis, but can still produce accurate estimates if certain potential problems are addressed. First, there may be autocorrelation issues. Autocorrelation occurs when the values of a variable in one time period are correlated with the values of that variable in a later time period. As an example, annual budget data from federal government agencies are often autocorrelated, given that the budgets for most federal agencies experience only incremental changes from year to year. As a result, yearly budget figures are often highly autocorrelated with the figures from a previous year. Autocorrelation does not bias regression estimates if the proper independent variables are utilized. The steps taken to correct for autocorrelation are described in detail later.

Second, heteroscedasticity may be present within the cross-sections. As previously mentioned, regression analyses produce estimated values for the variables under examination. Depending on the nature of the data being examined, those estimates can be very accurate. For example, the amount of gasoline needed to make a particular trip can be predicted using accurate information about the distance traveled, as well as vehicle gas mileage. In order to make that estimate, the assumption that must be made is that the numbers remain relatively stable. Intuitively speaking, a car does not get 35 highway miles per gallon one day, and while traveling at the same speed on the same highway, get 12 miles per gallon the next day. Unfortunately, cross-sectional data such as these often show tremendous “volatility” or fluctuations across the cross-sections. As a result, certain corrections must be made to the regression model in this study.

Third, contemporaneous spatial correlation among cross sections may be present. Simply put, this sort of correlation occurs when different cross-sections (in this case individual states), influence each other. This sort of correlation is common in studies where data from individual states are pooled for national or regional analyses.

Finally, a moving average across time may exist. Moving average considerations are common in observations of the stock market, where analysts are often concerned with the average prices of securities over a given time period. For example, a stock’s five-day moving average price might be calculated by adding up its closing price over a five-day time period, and dividing by 5. Although moving averages can be helpful in determining the values of variables over time, time-series data that contain recurring patterns of moving averages complicate regression analysis. These data exhibit a moving average across the years observed, and the appropriate statistical adjustment was made for this analysis.

Given these considerations, a series of methodological procedures were used to account for the data complexity. The analyses presented in the next sections are final estimates after the methodological issues were addressed.

■ Agriculture Off-Highway Estimates

The analysis begins with estimates¹⁸ for the variables of monthly agriculture refunds. The important variables within this set of estimates focus on the state variables. Tests were conducted for both contemporaneous spatial correlation and the moving average component. The tests indicate that the contemporaneous spatial correlation and moving average component were not present in the monthly data.¹⁹ The results of these estimation techniques are presented in Appendix A.

Using the two estimation techniques described in Appendix A, a range is offered as a result of the two techniques. This range consists of the estimated parameters from each of the analyses for each statistically significant and important variable. The statistical findings from the two analyses were very similar. Neither Illinois nor Iowa differ from the Midwestern states with respect to monthly agriculture gasoline refunds, since in both analysis these variables are not significant. However, the states of Michigan, Minnesota prior to 1998, and Wisconsin are all higher than the other Midwestern states in monthly agriculture refunds. As addressed in Table 2, Wisconsin has the highest amount of agriculture gasoline refunds as compared to the other Midwestern states when controlling for the fuel tax rate, number of farms, and average acreage. Wisconsin's estimates indicate that Wisconsin has approximately 1,600,000 gallons or about \$425,000 per month higher use of agriculture gasoline than the average Midwestern state. An important finding is that Minnesota prior to their law change in 1998 also had a higher amount of agriculture gasoline refunds. After Minnesota's law change in 1998, Minnesota had a significantly lower amount of agriculture gasoline refunds. Thus, this significant change in Minnesota's agriculture gasoline refunds is likely the result of the 1998 legislation.

Missouri agriculture gasoline showed significantly lower than average refunds. The estimate for Missouri was that its monthly agriculture gasoline refunds were about 2,000,000 gallons less than the average Midwestern state. At Missouri's FY2000 fuel tax rate, this equates to approximately \$360,000 less refunds than the average Midwestern state.

Table 3 compares Wisconsin to the border states for the monthly agriculture refund data.²⁰ Wisconsin is not statistically significantly different than the average border state. Although Wisconsin does not differ, Minnesota after the 1998 legislative change is significantly different than the average border state. The results for the border states show that Minnesota has approximately \$180,000 lower in agriculture refunds than the average border state.

¹⁸ The correlation coefficients and simple statistics for the variables are offered in Appendix A (Tables A1 and A2).

¹⁹ Two estimation techniques were offered. The first, entitled OLS is the ordinary least squares estimate after correction has been made for heteroscedasticity. The second, AR (2) is an autoregressive analysis that incorporates corrections for the autoregressive error term across time. The results of these estimation techniques are presented in the Appendix A (Table A3).

²⁰ The results of these estimation techniques are presented in the Appendix A (Table A4).

Table 2: Estimated Monthly Agriculture Gasoline Refunds				
State	Monthly Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Agriculture Refund	Higher/Lower Than Other Midwestern States
Illinois	N.S.	\$0.19	N.S.	Average
Iowa	N.S.	\$0.20	N.S.	Average
Michigan	1,306,779- 1,310,572	\$0.19	\$248,288 - 249,009	Higher
Missouri	2,113,269- 2,120,817	\$0.17	\$359,256 - 360,539	Lower
Minnesota before 1998	1,055,958- 1,058,206	\$0.20	\$211,192 – 211,641	Higher
Minnesota after 1998	854,442- 854,554	\$0.20	\$170,888 - 170,911	Lower
Wisconsin	1,684,511- 1,684,770	\$0.254	\$427,866 - 427,932	Higher
N.S. – Not significantly different from zero using 5% level of confidence				

Table 3: Border State's Monthly Agriculture Gasoline Refunds				
State	Monthly Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Agriculture Refund	Higher/Lower Than Other Border States
Minnesota before 1998	856,661-897,761	\$0.20	\$171,332 - 179,552	Higher
Minnesota after 1998	921,122-957,512	\$0.20	\$184,224 - 191,502	Lower
Wisconsin	N.S.	\$0.25	N.S.	Average
N.S. – Not significantly different from zero using 5% level of confidence				

As shown in Table 4, the second analysis of agriculture refund estimates is at the annual level for the time period 1994-2000.²¹ The results²² are similar for Wisconsin in this analysis. Wisconsin's estimates indicate that Wisconsin has approximately 16,000,000 gallons or over \$4,000,000 annual higher use of agriculture gasoline than the average Midwestern state. This finding coincides with the monthly agriculture refund finding of about \$425,000 a month, thus supporting the thesis that agriculture gasoline refunds are significantly higher in Wisconsin when compared to the average Midwestern state. An important supporting finding to the monthly analysis was the effect of Minnesota's law

²¹ The correlation coefficients and simple statistics for the variables are offered in Appendix A (Tables A5 and A6).

²² Complete results are offered in Appendix A, Table A7.

change in 1998. The annual results indicate that Minnesota had a significantly lower amount of annual agriculture gasoline refunds. Thus, this may further substantiate the effect of Minnesota's legislative change of 1998.

Table 4: Estimated Annual Agriculture Gasoline Refunds				
State	Monthly Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Agriculture Refund	Higher/Lower Than Other Midwestern States
Illinois	7,251,000- 7,709,210	\$0.19	\$1,377,690 – 1,464,750	Higher
Iowa	22,298,000- 23,332,000	\$0.20	\$4,459,600 – 4,666,400	Higher
Michigan	N.S.	\$0.19	N.S.	Average
Missouri	N.S.	\$0.17	N.S.	Average
Minnesota before 1998	18,741,000- 18,924,000	\$0.20	\$3,748,200 – 3,784,800	Higher
Minnesota after 1998	5,618,370- 7,116,000	\$0.20	\$1,123,674 – 1,423,200	Lower
Wisconsin	15,808,000- 16,594,000	\$0.254	\$4,015,232 – 4,214,876	Higher
N.S. – Not significantly different from zero using 5% level of confidence				

■ Industrial Off-Highway Estimates

The industrial estimation techniques follow the same pattern of tests as those offered in the previous agriculture analyses. The important variables within this set of estimates are the state variables. The results of these estimation techniques are presented in Appendix A.

The estimations for the monthly industrial refunds are offered in Table 5. These estimations for each state represent a comparative against the average of all Midwestern states. The result for Wisconsin implies that monthly industrial gasoline refunds are lower in the state when compared to the other Midwestern states.²³ The findings show that Wisconsin has approximately 900,000 gallons or \$227,000 lower monthly industrial gasoline refunds than the average midwestern state. Minnesota's legislative change in 1998 shows similar characteristics to its effect in agriculture gasoline refunds. This could be interpreted as an important legislative change in off-highway fuel usage.

²³ Complete results are offered in Appendix A, Table A8.

Table 5: Estimated Monthly Industrial Gasoline Refunds				
State	Monthly Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Industrial Refund	Higher/Lower Than Other Midwestern States
Illinois	817,610-828,603	\$0.19	\$155,346 – 157,435	Lower
Iowa	N.S.	\$0.20	N.S.	Average
Michigan	1,072,773-1,081,236	\$0.19	\$203,827 – 205,435	Higher
Missouri	N.S.	\$0.17	N.S.	Average
Minnesota before 1998	823,612-825,455	\$0.20	\$164,722 – 165,091	Lower
Minnesota after 1998	1,009,391-1,013,300	\$0.20	\$201,878 – 202,660	Lower
Wisconsin	894,511-901,982	\$0.254	\$227,206 – 229,103	Lower
N.S. – Not significantly different from zero using 5% level of confidence				

The findings²⁴ presented in Table 6, show Wisconsin's monthly industrial gasoline refunds as compared to its border states. Wisconsin is higher with respect to monthly industrial gasoline refunds when compared to the average border state. The higher than average refunds are about 785,000 gallons or \$200,000 monthly. It should be noted that Minnesota's 1998 legislative change indicates a significant reduction in monthly industrial gasoline refunds.

Table 6: Border State's Monthly Industrial Gasoline Refunds				
State	Monthly Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Industrial Refund	Higher/Lower Than Other Border States
Minnesota before 1998	800,379-810,374	\$0.20	\$160,076 - 162,075	Lower
Minnesota after 1998	853,393-860,263	\$0.20	\$170,679 - 172,053	Lower
Wisconsin	784,272-796,827	\$0.25	\$199,205 - 202,394	Higher

The second analysis of industrial gasoline refunds is an annual comparison. The results provide that with respect to the annual data, Wisconsin is similar to the average Midwestern state. Again, however, Minnesota's 1998 legislation reduced the amount of

²⁴ Complete results are offered in Appendix A, Table A9.

industrial gasoline refunds when compared to the average Midwestern state. The summarized results are shown in Table 7.²⁵

Table 7: Estimated Annual Industrial Gasoline Refunds				
State	Monthly Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Industrial Refund	Higher/Lower Than Other Midwestern States
Illinois	N.S.	\$0.19	N.S.	Average
Iowa	N.S.	\$0.20	N.S.	Average
Michigan	11,362,000- 11,533,000	\$0.19	\$2,158,780- 2,191,270	Higher
Missouri	8,553,000- 8,617,000	\$0.17	\$1,454,010- 1,464,890	Higher
Minnesota before 1998	N.S.	\$0.20	N.S.	Average
Minnesota after 1998	1,379,000- 1,390,000	\$0.20	\$275,800- 278,000	Lower
Wisconsin	N.S.	\$0.254	N.S.	Average
N.S. – Not significantly different from zero using 5% level of confidence				

■ Marine Off-Highway Estimates

The marine estimation techniques follow the same pattern of tests as those offered in the previous two analyses. The important variables within this set of estimates are the state variables. The results of these estimation techniques are presented in Appendix A. The estimations for monthly marine gasoline usage could not be obtained due to data constraints. The estimation uses the annual data of estimated marine gasoline usage as provided by the FHWA series Highway Statistics Table MF 24.

Table 8: Border State's Estimated Annual Marine Gasoline Usage				
State	Annual Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Marine Usage	Higher/Lower Than Other Border States
Minnesota before 1998	N.S.	\$0.20	N.S.	Average
Minnesota after 1998	N.S.	\$0.20	N.S.	Average
Wisconsin	N.S.	\$0.25	N.S.	Average
N.S. – Not significantly different from zero using 5% level of confidence				

The findings presented in Table 8, and in Table A11 (in Appendix A), show Wisconsin's estimated annual marine gasoline usage as compared to its border states. Wisconsin is average with respect to annual marine gasoline usage when compared to the average

²⁵ Complete results are offered in Appendix A, Table A10.

border state. This finding indicates that when controlling for the number of registered and unregistered boats and water commerce in the State of Wisconsin that Wisconsin is very similar in marine gasoline usage when compared to its border states. In marine gasoline usage Minnesota's 1998 legislative change was not statistically significant when compared to the border states.

Table 9: Estimated Annual Marine Gasoline Usage				
State	Annual Gallon Estimated Range	Fuel Tax Rate FY 2000	Amount Marine Usage	Higher/Lower Than Other Midwestern States
Illinois	N.S.	\$0.19	N.S.	Average
Iowa	10,615,000 – 11,046,000	\$0.20	\$2,123,000- 2,209,200	Lower
Michigan	N.S.	\$0.19	N.S.	Average
Minnesota before 1998	N.S.	\$0.20	N.S.	Average
Minnesota after 1998	N.S.	\$0.20	N.S.	Average
Wisconsin	N.S.	\$0.254	N.S.	Average
N.S. – Not significantly different from zero using 5% level of confidence				

The second analysis of marine gasoline usage was a comparison to the Midwestern states. The results provide that with respect to the annual data, Wisconsin is similar to the Midwestern states. Minnesota's 1998 legislation did not impact the amount of marine gasoline usage when compared to Minnesota's marine gasoline usage prior to 1998. The summarized results are shown in Table 9, and complete results can be found in Table A12 (in Appendix A).

Motor Fuel Tax Statutes and Descriptions

■ Wisconsin

Wisconsin imposes an excise tax on motor fuels for the privilege of operating a motor vehicle on the roads of the state. The definition of motor fuel includes gasoline and diesel, the two primary categories of motor fuel. Under Wis. Stat. §78.12(5), each licensed supplier pays motor fuel tax not later than the 15th of the month for motor fuel sold during the prior month. The present tax rate is 28.1¢ per gallon, and it is annually adjusted.

Wisconsin law contains statutory presumptions regarding alternate fuels and aviation fuel that support taxability. Wis. Stat. §78.53 contains a presumption that alternate fuel received by an alternate fuels dealer or user will be transferred into the supply tanks of motor vehicles. Under Wis. Stat. §78.61, there is a presumption that general aviation fuel received by a general aviation fuel dealer or user will be supplied to aircraft fuel tanks. However, Wisconsin law does not presume that gasoline or undyed diesel will be used for taxable purposes.

■ Comparison with Border States

Each of the Border States imposes a similar excise tax although there are many state-specific variations. Some of the states tax different types of fuel at different tax rates. Dyed diesel is exempt from federal fuels tax,²⁶ and most states also exempt it from state excise tax on fuels. However, Minnesota imposes its special fuels excise tax on both dyed and undyed diesel.²⁷ Appendix B Table 1 lists motor fuel excise tax rates for Wisconsin, the Border States and the Other Midwestern States, as well as the collection point for the tax. Table 1 does not present all taxes that states may impose on fuel. Some states impose other taxes, such as sales taxes, inspection taxes, and taxes for the privilege of receiving fuel in a state. These additional taxes are beyond the scope of this report. It is noteworthy that Wisconsin's tax rate per gallon is higher than in any of the other states. A complete analysis of the reasons for the variation in tax rates is also beyond the scope of this report. However, some possible explanations include other excise taxes or sources of revenue used to fund road building and maintenance, deferred maintenance, fewer losses through evasion, better collections, fewer miles of roads or lower traffic volume.

The point in time at which tax is collected varies from state to state. Illinois and Iowa each tax suppliers and distributors monthly. Minnesota's gasoline tax and its special fuels tax are assessed at the earliest point in the distribution process—at the time gasoline is received by the first licensed distributor in the state. Minnesota law defines “distributor” as any person who:

²⁶ 26 U.S.C. §4082.

²⁷ Minnesota Statutes 2001, Chapter 296A.

- (1) receives petroleum products in Minnesota for storage and subsequent distribution by tank car, tank truck or both;
- (2) produces, manufactures or refines petroleum products in Minnesota; or
- (3) imports petroleum products into Minnesota via boat, barge, or pipeline for storage and subsequent delivery at or further transportation from boat, barge or pipeline terminal in Minnesota.²⁸

Thus, Minnesota gasoline and special fuels taxes are payable not later than the 23rd day of the month following the month in which the product was *received* in Minnesota, in contrast with Wisconsin law, which imposes motor fuels tax on the amount *sold* in the prior month.

Michigan also imposes fuel tax at the time that gasoline and diesel at the time fuel is received, and has done so since January 1, 1993.²⁹ The legislative change was intended to reduce fraud and improve the tracking of the amount of motor fuel in Michigan.

Appendix B, Table 2 lists the statutory presumptions favoring the taxable use of motor fuel. Michigan law presumes that that motor fuel is to be used or consumed on the Michigan public roads or highways.³⁰ Similarly, Minnesota presumes that gasoline is intended for use in motor vehicles in Minnesota.³¹ The purchaser bears the burden of proving that it used the fuel for an exempt purpose. Therefore, if there is a lack of evidence, the sale is deemed taxable. Since the purchaser bears the burden of rebutting the presumption of taxability, the purchaser has a greater incentive to keep complete and accurate records demonstrating its off-road fuel usage so that it can claim the exemption.

■ Comparison with Other Midwestern States

Each of the Other Midwestern States listed below also imposes an excise tax on fuel. Wisconsin's rate of 28.1 cents per gallon exceeds the rate in each of these states as well. As noted above, this does not necessarily represent all of the taxes imposed on fuel in the comparison states. Nebraska's tax rate of 24.5 cents per gallon is the closest to Wisconsin's tax rate.³² Nebraska and Indiana each address gasoline and diesel excise taxes in separate chapters of their statutes. The following chart shows the motor fuel excise tax per gallon in Wisconsin, the Border States and the Other Midwestern States. Appendix B, Table 2 lists the presumptions of taxable use in the Other Midwestern States. Missouri law presumes that motor fuel is to be used or consumed on the highways of the state in producing or generating power to propel motor vehicles.³³ Indiana's special fuel tax law contains a rebuttable presumption that all undyed or unmarked special fuel (which includes diesel fuel) is to be sold for propelling motor vehicles.³⁴ A person claiming an exemption is required to maintain adequate records to document

²⁸ Minnesota Statutes 2001, §296A.01, subd. 15.

²⁹ Michigan Compiled Laws, Act 225 of 1992.

³⁰ Michigan Compiled Laws 2001, §207.

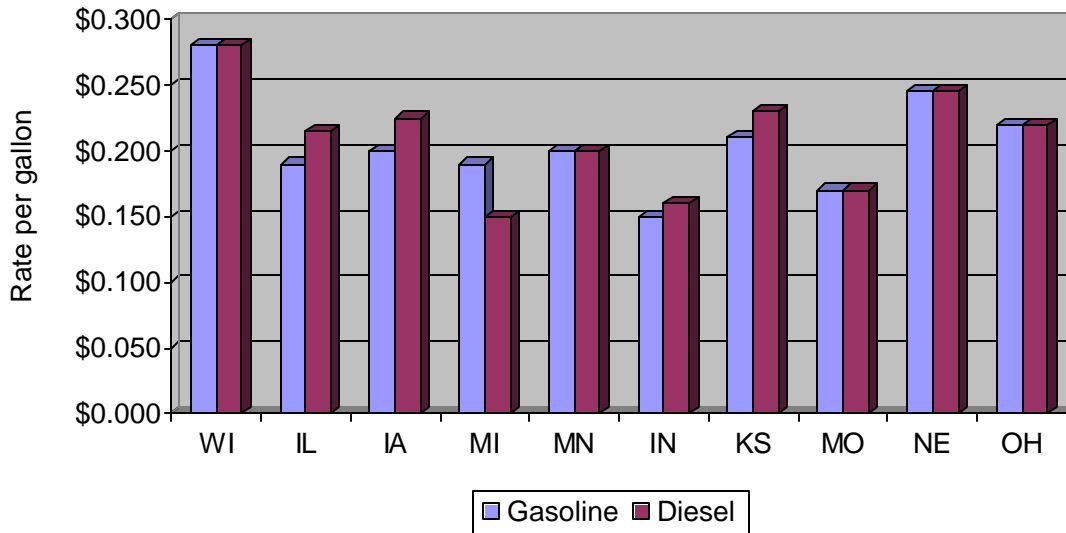
³¹ Minnesota Laws, Ch. 296A.

³² Nebraska Department of Revenue web site: <http://www.revenue.state.ne.us/fuels/fuelrate.htm>

³³ Missouri Revised Statutes 2001, §142.806.

³⁴ Indiana Code 2001 §6-6-2.5-28(b).

Motor Fuel Excise Taxes
(Does not include other taxes imposed on fuel)



taxable and exempt use.³⁵ Nebraska law contains a requirement that any person using a fuel subject to taxation for which tax has not been paid is required to pay the excise tax and file a return, unless the supplier, distributor, wholesaler, or importer paid it.³⁶ Thus, any person using untaxed fuel in a taxable manner is also responsible for the penalties and interest associated with a failure to file a return and pay the tax.

The collection point for the tax varies in these states as well. In Indiana, Kansas, Nebraska and Ohio, the liability may be transferred and paid at a later time by a licensed supplier, distributor, wholesaler or dealer. Missouri law provides for the “precollection” of its excise tax on fuels.³⁷ The term “precollection” acknowledges that the tax will be added to the price of the fuel and paid by the ultimate consumer. In Missouri, fuel tax is generally payable by the second day of the second month following the date on which it is withdrawn from the terminal. In these states, as in Wisconsin, there is a delay in the assessment and/or payment of motor fuels tax until some point after the fuel has been sold at the terminal. This delay in collecting taxes costs the states the time value of money from the time the tax liability is incurred at the point that fuel is withdrawn, to the time that tax is due and payable by the licensed entity. However, in Missouri, tax on imported fuel is payable by licensed distributors within three days after nonexempt fuel is imported into Missouri. Missouri law also makes terminal operators jointly and severally liable for the tax.

³⁵ Ibid.

³⁶ Nebraska Revised Statutes 2001, §66-4, 106.

³⁷ Chapter 142, Revised Statutes Missouri 2001.

Statutory Exemptions for Off-Road Usage

■ Wisconsin

The Wisconsin Motor Vehicle Fuel Tax Law exempts certain off-road uses from the motor vehicle fuel tax³⁸ (other exemptions not relevant to this analysis have not been cited). These exemptions may be subdivided into gasoline exemptions and diesel exemptions.

Gasoline Exemptions

Mobile Machinery and Equipment

Gasoline sold for nonhighway use in mobile machinery and equipment and delivered directly into the consumer's storage tank in an amount not less than 100 gallons. (Wis. Stat. §78.01(2)(e).) Use in a snowmobile, an all-terrain vehicle that is not registered for private use, or a recreational motorboat are taxable uses under that section.³⁹ A portion of the motor fuel tax collected is allocated to the Department of Natural Resources to support those activities in the state. The law also exempts mobile machinery and equipment vehicles not designed for transportation of persons or property and only incidentally operated on public roads. (Wis. Stat. §78.005(11).) The definition specifically includes farm tractors, ditch digging apparatus, power shovels, drag lines, earth-moving equipment and machinery and road construction equipment and maintenance machinery such as asphalt spreaders, bituminous mixers, bucket loaders, ditchers, leveling graders, finishing machines, motor graders, paving mixers, road rollers, scarifiers and earth-moving scrapers. (Wis. Stat. §78.005(11).) The definition specifically excludes dump trucks or self-propelled vehicles originally designed for the transportation of persons or property to which machinery has been attached such as truck-mounted transit mixers, cranes, shovels, air compressors, well-boring apparatus, corn shellers, lime spreaders, and feed grinders. (Wis. Stat. §78.005(11).)

Aircraft

Gasoline sold for use in aircraft to a licensed general aviation fuel dealer, and delivered directly into the dealer storage tank in an amount not less than 100 gallons. (Wis. Stat. §78.01(2)(f).) Note that gasoline sold for use in aircraft, while exempt from the motor fuel tax, is subject to a separate general aviation fuel tax at the rate of 6 cents per gallon. The aviation fuel tax is beyond the scope of this report.

³⁸ 1999-2000 Wisconsin Statutes §78.01.

³⁹ A recreational motorboat is a motorboat used predominantly for the entertainment, amusement or recreation of the boat's owner, whether or not it is also used in a trade or business. Wis. Stat. §78.005 (13g). An all-terrain vehicle may be registered for private use if it is used exclusively for agricultural purposes or used exclusively on private property. Wis. Stat. §23.33(d).

Diesel Exemptions

Heating Oil

Undyed diesel fuel sold for use as heating oil. (Wis. Stat. §78.01(2m)(c).)

Train

Undyed diesel fuel sold for use in trains. (Wis. Stat. §78.01(2m)(d).)

Dyed Diesel Fuel

Dyed diesel fuel sold for off-highway use (other than use in a snowmobile, an all-terrain vehicle that is not registered for private use or in a recreational motorboat)⁴⁰, or if no claim for a refund for the tax on the diesel fuel may be made under Wis. Stat. §78.75(1m)(a)3.⁴¹ (Wis. Stat. §78.01(2m)(f).) The latter clause of this section contradicts the first clause and permits dyed diesel fuel to be used for those off-road uses that are otherwise taxable under the first clause. In addition, since no refund is available the purchase of less than 100 gallons of diesel fuel for off-road use, it appears that tax exempt, dyed diesel fuel may be used.

Note that the above exemptions are written so that *no tax is imposed*. In addition, the diesel fuel exemptions *prohibit* the supplier, wholesaler or retail dealer from collecting a tax on diesel fuel fulfilling any one of the exempt conditions. Since no tax is imposed, the state bears the burden of disproving an exemption claim.

In addition, any person using motor vehicle fuel (includes gasoline and diesel) for a purpose other than operating a motor vehicle on the public highways may make a claim for a tax refund if the claim is 100 gallons or more. (Wis. Stat. §78.75(1m)(a)1.) However, no refund may be obtained if the use is snowmobile, aircraft, recreational motorboat, or all-terrain vehicle not registered for a private use. (Wis. Stat. §78.75(1m)(a)2 and 2m.)

■ Comparison with Border States

Each Border State exempts off-road fuel usage from taxation to some extent. Appendix B, Table 3 summarizes the exemptions for off-road use of gasoline in Wisconsin, the Border States and the Other Midwestern States. Appendix B, Table 4 summarizes the exemptions for off-road use of undyed diesel. Some states permit the use of dyed diesel

⁴⁰ A recreational motorboat is a motorboat used predominantly for the entertainment, amusement or recreation of the boat's owner, whether or not it is also used in a trade or business. Wis. Stat §78.005 (13g). An all-terrain vehicle may be registered for private use if it is used exclusively for agricultural purposes or used exclusively on private property. Wis. Stat. §23.33(d).

⁴¹ A claim for a refund is not available under Wis. Stat. §78.75(1m)(a)3 for (1) motorboats, except motorboats exempt from registration as motor vehicles and motorboats that are not recreational motorboats, (2) use in snowmobiles; (3) all-terrain vehicles unless registered for private use; or (4) tax on less than 100 gallons.

in watercraft, others exempt clear diesel from state fuels tax if used in watercraft, and others permit the exemption only for commercial watercraft. The states do not always clearly distinguish gasoline from diesel in creating the exemption classifications. The types of exempt uses differ, and the classifications used also differ from state to state. Note that Michigan and Minnesota laws contain a presumption that a sale is taxable. Michigan's entire motor vehicle tax law was revised effective in 2001.⁴² Minnesota's motor fuel tax law was re-codified in 1998; however, the presumption that gasoline is intended for use in motor vehicles in Minnesota predated that re-codification.⁴³ The purchaser bears the burden of proving that it used the fuel for an exempt purpose. Therefore, if there is a lack of evidence, the sale is deemed taxable. Since the purchaser bears the burden of rebutting the presumption of taxability, the purchaser has a greater incentive to keep complete and accurate records demonstrating its off-road fuel usage so that it can claim the exemption.

In Iowa, the statute is phrased that "a refund is allowable" if the person uses the fuel for a listed non-taxable purpose, paid the tax, and has presented a refund claim to the Iowa Department of Revenue and Finance, which claim has been approved. This change to the Iowa statute was made effective January 1, 1996, and was written into the statute along with more specific exemptions.⁴⁴ This language suggests that such a refund is not mandatory, but is permissible where the purchaser has provided a properly documented refund claim. Contrast this with Wisconsin's phrasing that "no tax is imposed or may be collected..." (Wis. Stat. §78.01(2m).)

Iowa and Minnesota each have a specific exemption for mobile machinery and equipment.⁴⁵ Most of the states tax aviation fuel at a separate, lower rate of tax. Both Illinois and Minnesota also earmark a portion of the motor fuel tax estimated for off-road by recreational users for state programs relating to those uses.⁴⁶ Where Table 1 shows a reference to the "other" category, the state's law contains a general exemption covering the subject rather than a specific exemption.

■ Comparison with Other Midwestern States

The gasoline and diesel exemptions vary in the Other Midwestern States as well. Indiana issues permits that allow gasoline to be used in motorboats to be purchased tax-exempt.⁴⁷ Indiana, Missouri and Nebraska each specify that agricultural uses of gasoline are exempt from excise tax. In all of the Other Midwestern States there is general exemption language for other non-highway uses.

⁴² Michigan Compiled Laws, Act 403 of 2000.

⁴³ 1998 Minnesota Session Laws, Chapter 299.

⁴⁴ The prior language had permitted refunds "to persons other than a distributor, dealer or user licensed" under chapter 452A under a refund permit to for certain specified purposes and in general "for any purpose other than in watercraft or aircraft or for propelling motor vehicles operated upon the public highways."

⁴⁵ Iowa Code 2001, § 452A.17.1.a.(4); Minnesota Rules §8145.1400, subp. 2. B.

⁴⁶ Illinois Compiled Statutes 2001, 35 ILCS 505/8; Minnesota Statutes 2001, § 296A.18.

⁴⁷ Indiana Code 2001, Ch. 1.1.

Indiana has a permit system that allows a permit holder to purchase gasoline without paying gasoline tax. For other nonhighway uses, the purchaser may file for a refund. Generally, the Other Midwestern States employ refund procedures for motor fuel used for non-highway purposes. Kansas and Ohio require a refund permit. Nebraska allows a refund credit against income tax for nonhighway uses rather than allowing a direct refund.

Processes for Claiming Off-Road Exemption for Undyed Fuel

■ Wisconsin Law

Under Wisconsin law, the tax is not imposed or collected on gasoline or undyed diesel fuel sold for exempt purposes and meeting the exemption requirements. (Wis. Stat. §§78.01(2) and (2m).) The customer provides the fuel supplier or vendor with documentation of the eligible exempt purpose for which the gasoline or undyed diesel fuel is purchased. Wisconsin's exemption certificate for gasoline and undyed diesel fuel (MF-209) collects the following information:

1. Customer name, business address and telephone, federal employer identification number (plus sole proprietor's are to give their social security number), signature, and date signed.
2. The customer is to check all boxes that apply to indicate how the exempt fuel will be used. The categories include those set forth at Section III.A. above. If the person checks the box for off-road use in mobile machinery and equipment or "other" they are to describe the use.
3. Supplier's name, address, signature and date signed.

The Department does not receive a copy of the exemption certificate. An exemption certificate is effective for one year. While the form indicates that the customer must attest to the exempt usage, the form does not contain an attestation, such as: By signing this certificate, customer agrees and attests that the motor fuel purchased under this exemption certificate will be used only for the exempt purposes designated below. However, the penalties for providing false or fictitious information are stated on the bottom of the form.

Suppliers claim a deduction for exempt sales on their monthly reports. Non-licensed vendors may file a claim for a refund. In addition, persons who use gasoline and undyed diesel fuel for off-road purposes may file a claim for a refund. Companies owning the following types of vehicles with power take-off units that share the same fuel supply tank used to power the vehicle may receive a partial refund of the motor vehicle fuel tax paid: waste management trucks (30%), ready-mix trucks (35%), and liquid waste pumping trucks (15%).

Wisconsin law also provides a refund claim procedure. However, it also provides that the purchaser is required to assign the claim for a refund on undyed exempt diesel and on all exempt gasoline to the person from whom the ultimate consumer purchased the fuel.⁴⁸

⁴⁸ Wis. Stat. §78.01(2r)(a).

Refund claim forms are available for agricultural users (MF-003W) and nonagricultural users (MF-023W). The forms do not state the claims assignment requirement.

1. Claimant's name, federal employer identification number (plus sole proprietor's are to give their social security number), and mailing address.
2. Nonagricultural users provide the type of activity.
3. Dates of fuel purchases covered by the claim.
4. Agricultural users provide farm acreage.
5. Type of organization: individual, partnership, Wisconsin or out-of-state corporation (including date incorporated), or other (describe). Wisconsin county of business location.
6. Attach invoices verifying fuel purchases and indicating the amount of Wisconsin fuel tax paid and adding machine tapes showing how the refund shown on the form was calculated.
7. Refund computation schedule: Rate of tax, total gallons of gasoline and diesel purchased and used at each rate, subtract gallons included used in licensed cars and trucks, to get gallons on which refund is claimed, multiply by the tax rate to obtain the refund amount. The totals for gasoline and diesel at each rate are then added together and listed as total gallons and total refund.
8. Equipment in which the fuel was used must be identified. In addition, nonagricultural users claiming a partial refund for power take-off units complete a separate column showing the gallons for each type of equipment.
9. Above the signature line is the following paragraph:
"DECLARATION: I declare that I have examined this claim and attachments and to the best of my knowledge and belief it is true, correct and complete. The motor vehicle fuel purchases on which this claim is based have been made within the last 12 months." The signature, business telephone number and date are on the last line of the form.

Wisconsin's motor fuel tax exemption and refund system provides administrative efficiency because the state does not collect the tax up front for most exempt uses. However, it provides greater opportunity for evasion. The state must determine that a given purchase was taxable, locate the party to whom the fuel was sold and pursue tax collection. This puts the state at a disadvantage. A person providing false information on an exemption certificate may be difficult to locate. In addition, the state bears the burden of proving that the sale was taxable and bears the risk that the purchaser will have the money to pay the tax once liability is established. Alternatively, the state could collect and hold the tax until the purchaser has established a legitimate right to an exemption.

Then, if the state is not satisfied that the refund claim is legitimate, it simply denies the claim and no collection is required. However, collection remains a concern if the state issues an erroneous refund.

■ Comparison with Border States

The processes employed for refunds in Wisconsin, the Border States and the Other Midwestern States are summarized in Table 5 of Appendix B. None of the Border States distinguish between types of motor fuel in setting their refund process. Iowa requires that anyone who wishes to obtain a refund for non-taxable use first obtain a permit.⁴⁹ The permit application includes the name, address, occupation, nature of the applicant's business, and describes and identifies the machines and equipment in which the fuel is to be used. Each permit is assigned a number and a cumulative record of claims is kept by permit. This facilitates the review and audit of exempt transactions by each purchaser. In Wisconsin, the state would have to audit the exemption certificates maintained by each supplier or vendor to identify those purchasers with substantial exemption claims.

The information required by Wisconsin, the Border States and the Other Midwestern States are summarized in Appendix B, Table 6. Each Border State's claim form differs in the level of detail required. One detail required by several of the states is the claimant's location address (in addition to the mailing address). This may facilitate follow up after the refund claim has been processed.

Appendix B, Table 7 identifies the form of reimbursement in Wisconsin as compared to the Border States and the Other Midwestern States. For example, Iowa permits an income tax credit, Michigan permits a fuel tax deduction or a refund, and Illinois permits refunds only if appropriations are available for that purpose. Otherwise, claimants receive a credit memorandum.

■ Comparison with Other Midwestern States

As noted in Appendix B, Table 5, Kansas and Ohio each have adopted refund permit processes.⁵⁰ Nebraska restricts refunds to clear diesel, tax paid on fuels destroyed or for overpayment of tax.⁵¹ All other purchasers may receive only an income tax credit.⁵² In essence, this procedure insures that the person claiming an off-road use exemption has paid his, her or its income tax liability to Nebraska before the state will return money to the person. Nebraska also generally requires that the equipment for which the off-road use is claimed be listed on the person's personal property tax list for the prior year. Thus, only a person who paid personal property tax on the equipment may claim it for an exempt use. These types of provisions enforce the concept that the only law-abiding taxpayers deserve a refund. Effective January 1, 2002, Nebraska eliminated a requirement

⁴⁹ Iowa Code 2001, §452A.17.

⁵⁰ Kansas Statutes 2001, §79-3454; Anderson's Ohio Revised Code 2001, §5735.16.

⁵¹ Nebraska Revised Statutes 2001, §66-672.

⁵² Nebraska Revised Statutes 2001, §§66-4, 120 through 66-4, 131

that persons seeking income tax credits first get a permit.⁵³ It has incorporated the information previously collected in that schedule to be attached to the person's income tax return. A representative of their fuel tax division advised us that he felt the refund process resulted in better compliance because the claim is always looked at before the refund is processed, while an income tax credit is automatically processed and must be later audited if it appears to be questionable.

As noted on Appendix B, Table 6, most of the Other Midwestern States (Indiana is the exception) request both a mailing address and a location address on the refund forms. In addition, the majority of Other Midwestern States request a description of how the fuel was or is to be used either on the permit application or the refund claim form. Three of the Other Midwestern States subtract applicable sales or use tax from the refund.

Ohio has a specific statute permitting the department to apply a refund in partial or full satisfaction of any amount owed the department by the taxpayer.⁵⁴ Nebraska sets up a de facto process on gasoline, as it is a refundable credit against income tax, and any tax due would be deducted before a refund would be payable.⁵⁵ The form of reimbursement for the Other Midwestern States are set forth in Appendix B, Table 7.

⁵³ Nebraska Revised Statutes 2001, §66-4,122, repealed by LB 168, §15.

⁵⁴ Anderson's Ohio Revised Code 2001, §5735.143.

⁵⁵ Nebraska Revised Statutes 2002, §66-4, 124.

Enforcement Penalties for False or Fraudulent Exemption Claims

■ Wisconsin Law

Wisconsin law imposes the following penalties relating to the off-road exemptions:

1. *Theft of Tax Moneys.* Any licensed motor vehicle fuel supplier who fails or refuses to pay over to the state at the required time the motor vehicle fuel tax due, or who fraudulently withholds or appropriates or otherwise uses such moneys is guilty of the crime of theft. Wis. Stat. §78.15.
2. *Suspension and revocation of licenses.* Licensed suppliers may have their license suspended or revoked for good cause due to a violation of the provisions of Chapter 78. (Wis. Stat. §78.65.)
3. *Returns, failure to pay; refunds.* Unpaid taxes bear interest at 12% per annum. (Wis. Stat. §78.68(1).) Delinquent motor vehicle fuel taxes bear interest at the rate of 1.5% per month. (Wis. Stat. §78.68(2).) If not paid due to neglect, the tax is subject to a 25% penalty. (Wis. Stat. §78.68(3).) If not paid for good cause, the penalty is 5% for each month during which the failure continues, up to 25%. (Wis. Stat. §78.68(4).) If due to a fraudulent or false return with intent to evade tax, the penalty is 50% of the tax. (Wis. Stat. §78.68(5).) Failing to furnish a return, information or date is subject to a \$500 fine or 30 days imprisonment, or both. (Wis. Stat. §78.68(6).)
4. *Personal liability.* Any officer, employee, fiduciary or agent who is responsible for paying taxes, interest, penalties or other charges under this chapter incurred by another person, as defined in s. 77.51 (10), is personally liable for those taxes, interest, penalties or other charges. (Wis. Stat. §78.70(6).)
5. *Criminal Penalties.* Any person committing any of the following may be fined not more than \$500 or imprisoned not more than 6 months or both:
 - Uses a false or fictitious name or gives a false or fictitious address in any application or form required by Chapter 78, or otherwise commits fraud in any application, record, report or claim for refund. (Wis. Stat. §78.73(1)(d).) Note that it may be difficult to identify and/or locate a person giving a false or fictitious name or address.
 - Presents an exemption certificate or obtains motor vehicle fuel tax-free and uses the fuel in a manner other than the manner for which the certificate was issued. (Wis. Stat. §78.73(1)(dm).)

- Uses motor vehicle fuel purchased tax-free and obtained from the storage tank of a general aviation fuel dealer in a motor vehicle for highway purposes. (Wis. Stat. §78.73(1)(dr).)
- Violates any other provision of Chapter 78 not enumerated in Wis. Stat. §78.73(1)(a) to (e) and subs. (2) to (4). (Wis. Stat. §78.73(1)(f).)

■ Comparison with Border States

Appendix B, Table 8 compares the civil and criminal penalties for exemption violations in Wisconsin, the Border States and the Other Midwestern States. Many of the states impose greater penalties than Wisconsin for false information or fraudulent practices. There are enhanced penalties for multiple violations or for those made with the intent to evade tax. These penalties are likely aimed at deterring violators from evading tax in the first instance, and to punish those who commit multiple violations. In Iowa, the criminal penalty depends upon the amount of money involved in the fraudulent practice.⁵⁶ This type of graduated structure has a certain appeal as a logical method of distinguishing the more serious violation in a measurable way. In Iowa, the crime is not a felony unless the amount involved exceeds \$1,000.⁵⁷ Minnesota punishes willful evasion of tax as a felony, while other infractions are misdemeanors or gross misdemeanors.⁵⁸ The civil penalties under Minnesota law include forfeiting the refund claim if it contains false information and the violator loses the privilege of claiming a refund for fuel purchased within the six months after conviction.⁵⁹

■ Comparison with Other Midwestern States

The Other Midwestern States reviewed also provided a range of civil and criminal penalties. Indiana and Missouri draw a distinction similar to Minnesota in treating of willful evasion of tax as a felony.⁶⁰ Kansas and Ohio have greater criminal penalties for subsequent violations.⁶¹ Indiana applies the penalties of perjury to statements made on a refund claim form.⁶²

On the civil side, Kansas and Ohio will cancel a refund permit for any false statement, thereby precluding an offender from obtaining a refund until the permit is reinstated or a new one issued.⁶³ Ohio's cancellation provision states that the person may not be reinstated for one year.

⁵⁶ Iowa Code 2001, §§714.9 through 714.14.

⁵⁷ Ibid.

⁵⁸ Minnesota Statutes 2001, §296A.23.

⁵⁹ Ibid.

⁶⁰ Indiana Code 2001, §6-6-2.5-63 and §6-6-1.1-1308; Missouri Revised Statutes 2001, §142.909.

⁶¹ Kansas Statutes 2001, §79-3464e; Anderson's Ohio Revised Code §5735.99.

⁶² Indiana Code 2001, §6-6-1.1-904.1 and §6-6-2.5-32; Revenue Forms GR-4136 (Rev. 02/2000) and SFR-1032 (Rev. 03/2000).

⁶³ Kansas Statutes 2001, §79-3455; Anderson's Ohio Revised Code §5735.16.

Uses and Penalties for Misuse of Dyed Diesel Fuel

■ Wisconsin Law

Wisconsin law exempts from the motor vehicle fuel tax dyed diesel fuel sold for off-highway use other than use in a snowmobile, an all-terrain vehicle not registered for private use, or in a recreational motorboat. (Wis. Stat. §78.01(2m)(f).) Dyed diesel fuel may be used only for an exempt purpose. (Wis. Stat. §78.01(2p).)

The penalty for misuse of dyed diesel fuel is the greater of \$1,000 or twice the amount of the tax that should have been paid on the fuel. (Wis. Stat. §78.155.) The penalty may be imposed upon any seller who *knows or has reason to know* that the person will use the fuel for a taxable purpose. (Wis. Stat. §78.155(1).) It may also be imposed upon the person who *knows or has reason to know* that he or she used dyed diesel fuel for a taxable purpose. (Wis. Stat. §78.155(2).) Thus, the state bears the burden of proving knowledge or that the person should have known that the fuel would be used for a taxable purpose at the time of sale.

■ Comparison with Border States

Appendix B, Table 8 sets forth the penalties for misuse of dyed diesel. The Border States vary the treatment of dyed diesel fuel, especially as it relates to mixing dyed and undyed fuel. For example, in Illinois, a person unintentionally mixing dyed and undyed diesel can claim a refund of the tax paid on the undyed diesel,⁶⁴ while in Michigan, mixed fuel is taxed as undyed.⁶⁵ Misuse of dyed diesel for highway or other taxable purposes varies as well. In Illinois, the law distinguishes first and subsequent offenses, as well as considering selling dyed fuel for highway purposes to be a more serious offense than possession for highway purposes.⁶⁶

Civil penalties become greater for subsequent offenses. In general, Michigan and Iowa impose lesser civil penalties than Wisconsin, although the Michigan penalty climbs to \$5,000 for third and subsequent penalties in a 12-month period.⁶⁷ Minnesota's civil penalty is interesting in its multiplication of the penalty by the number of prior penalties imposed.⁶⁸

⁶⁴ Illinois Compiled Statutes 2001, 35 ILCS 505/13.

⁶⁵ Michigan Compiled Laws 2001, §207.1020.

⁶⁶ Illinois Compiled Statutes 2001, 35 ILCS 505/15.

⁶⁷ Michigan Compiled Laws 2001, §207.1122.

⁶⁸ Minnesota Statutes 2001, §296A.22.

■ Comparison with Other Midwestern States

The Other Midwestern States civil and criminal penalties for misuse of dyed diesel are also summarized in Appendix B, Table 9. Ohio and Nebraska impose civil penalties comparable to Wisconsin for misuse of dyed diesel fuel.⁶⁹ Indiana has a low civil penalty of \$200 for a first offense, but it climbs rapidly, with a \$2,500 civil penalty for a second offense and a \$5,000 civil penalty for each subsequent offense.⁷⁰

The criminal penalties vary as well. In Missouri, a violation of the dyed diesel provisions of the statute is a class A misdemeanor.⁷¹ Indiana and Kansas impose greater criminal penalties for subsequent violations.⁷² This reinforces the concept that a person who knows or should know that they are violating the law is more culpable than a person who may be merely ignorant. In each of those states, knowing manipulation of dyed fuel is a felony.

⁶⁹ Anderson's Ohio Revised Code 2001, §5735.124; Nebraska Revised Statutes 2001, §66-681.

⁷⁰ Indiana Code 2001, §6-6-2.5-64.

⁷¹ Missouri Revised Statutes 2001, §142.932.

⁷² Indiana Code 2001, §6-6-2.5-62; Kansas Statutes 2001, §79-3464e.

Auditing Statutes and Processes

■ Wisconsin

Wisconsin law permits Department of Revenue employees, deputies and agents to conduct audits. (Wis. Stat. §78.80(1).) They may examine the books, records, papers, receipts, invoices, storage tanks and equipment of any licensee, broker, dealer or purchaser of motor vehicle fuel. (Wis. Stat. §78.80(1).) The audit may be conducted to verify the truth and accuracy of any statement, report or return, or to make a determination whether or not the motor fuel taxes have been paid. (Wis. Stat. §78.80(1).) The department may hold hearings, issue subpoenas, administer oaths and take sworn testimony. (Wis. Stat. §78.80(2).) They may seek relief against any person who refuses to permit access or testify in court. (Wis. Stat. §78.80(2).)

■ Comparison with Border States

Auditing processes for Wisconsin, the Border States and the Other Midwestern States are summarized in Appendix B, Table 10. Each of the Border States permits auditing of refund claims, books and records relating to motor fuel taxes. Michigan took the process a step further in its recent restatement of its Motor Fuel Tax Act, effective April 1, 2001. Michigan created a motor fuel tax evasion prevention fund to fund the development of auditing techniques to aid in exposing tax evasion schemes and incidents.⁷³

Inspections of equipment and sampling are also permitted. Both Michigan and Illinois impose a specific penalty for refusal to permit an inspection or audit. In Michigan, refusal bears a civil penalty of \$5,000 in addition to the tax and any other penalty, and is a felony.⁷⁴ In Illinois, there is a \$1,000 civil penalty for refusal.⁷⁵

■ Comparison with Other Midwestern States

As noted in Appendix B, Table 10, Missouri and Nebraska specify a significant penalty for refusal to permit an inspection or audit.⁷⁶ Logically, this type of penalty should deter any person from refusing to permit an inspection or audit. In contrast, the Wisconsin Department of Revenue would have to seek a court order to compel the person's cooperation. The ensuing delay would eliminate the element of surprise in the inspection or audit.

⁷³ Michigan Compiled Laws 2001, §207.1142

⁷⁴ Michigan Compiled Laws 2001, §207.1134.

⁷⁵ Illinois Compiled Statutes 2001, 35 ILCS 505/12a.

⁷⁶ Missouri Revised Statutes 2001, §142.944; Nebraska Revised Statutes 2001, §66-681.

Policy Options for Reducing Evasion and Increasing Fuel Tax Collection

The foregoing comparative analysis has exposed a number of the ways in which Wisconsin's exemption from fuel tax for off-road usage is vulnerable to fraud and evasion. In addition, the analysis demonstrates the ways in which various Midwestern states have addressed these vulnerabilities. This section will summarize some potential policy options Wisconsin could utilize to decrease fuel tax evasion stemming from off-road exemptions and to increase the efficiency of its fuel tax collection and auditing processes.

■ Reducing Evasion

Fuel tax evasion can occur in a number of different ways. A purchaser could file a false exemption certificate or refund claim, or simply use untaxed fuel for a taxable purpose. A supplier or vendor could create false exemption certificates and claim a tax deduction or refund. The state could address evasion on a number of fronts. No one strategy will be effective in all cases. Many policy options for reducing fuel tax evasion arising out of the misuse of off-road fuel tax exemptions will involve changes in the statutes governing off-road fuel tax collection, exemption, processes and penalties.

Tax Exemption

The present exemption process does not favor the state. The purchaser completes exemption certificate and files it with the supplier. The supplier deducts exempt transactions from the fuel tax it pays based on the certificates it collects. This process fails to insure the validity of the exemption. Furthermore, the state is in a difficult position if it chooses to seek to verify or challenge the validity of any exemption transaction. First, the state does not receive sufficient information in the process to identify suspect transactions. The state may fairly easily audit the records of the supplier to determine whether it has exemption certificates to support the deductions it has taken. However, this does not subject the actual use of the exemption certificate to any scrutiny. If a person is misusing exemption certificates, it could spread them across multiple suppliers. Then, the state would have to go to each supplier to obtain an aggregate picture of the use of exemption certificates by any given person. In addition, the state must rely on the information provided in the exemption certificates to try to locate a suspect purchaser. The state would be in a stronger position to scrutinize exemption transactions by collecting information directly from those who claim to be exempt. The states with refund procedures for off-road usage have the opportunity to review each purchaser's exemption claim before returning the fuel tax. While this will create a greater administrative burden upon the state, it will also permit the state to review every claim for validity before any tax is refunded.

Burden of Proof

Under present law, the state does not have a presumption favoring taxation. This type of provision is common in other states, and is found in both Wisconsin's aviation and alternative fuel statutes. Why should this matter? Presently, the state is in the position of rebutting a claim of exemption. However, the purchaser has control of all of the information necessary to establish the validity of the claim. It is at least illogical and likely unreasonable to require the state to show that fuel was used for on road purposes, when the information necessary to demonstrate use is solely in the hands of the purchaser. A presumption favoring taxation does not change the substantive policy of what uses are exempt from fuel tax. Rather, it requires the person claiming the exemption to substantiate the claim through appropriate records. Unfortunately, if the burden of proof is too great, state law may unintentionally aid those who choose to evade tax, as the state will be unable to collect tax from those who are obligated to pay it.

Dyed Diesel

Another statute imposing a greater burden of proof on the Department of Revenue is requiring proof of a "knowing" violation for misuse of dyed diesel. The issue is whether this proof is necessary to protect innocent purchasers of dyed diesel, or whether a rebuttable presumption would adequately protect innocent purchasers without unduly burdening the Department of Revenue.

Penalties

Wisconsin is one of the most lenient states in the penalties it imposes for fuel tax evasion. Stiff fines, classification as a felony and enhanced penalties can be a strong deterrent to would-be tax evaders. (See Denison and Eger 2000). If the public perceives that the penalty is not worth the short-term gain from tax evasion, then the state's fuel tax collections should increase. Tax evaders are criminals. Evasion burdens every taxpayer as well as the state. In addition, there is no specific penalty in Wisconsin for refusal to permit an audit or inspection. The state must seek a court order to compel the audit. A stiff penalty, whether civil or criminal, for refusal to permit an audit or inspection provides the state with an important weapon against tax evaders. One benefit of enhanced penalties is that there is no cost to enact them. There are no changes required to processes or staffing. And, the threat brought by enhanced penalties can act as leverage in negotiations with suspected tax evaders to force settlements and collection of taxes owed. It also permits the state to use tactics such as amnesty programs for admitted evaders to increase its collections.

■ Increasing Fuel Tax Collection

The point at which tax is collected affects the efficiency of fuel tax collection. Most states have a delay between the removal of fuel from the terminal rack and the time when tax is due and payable.

Collection Point

The state loses the time value of money for each delay in the point at which fuel tax is collectible. Wisconsin's system could collect at the time of the fuel tax purchase at the terminal. In addition, Wisconsin could eliminate the deduction to suppliers for their purchaser's off-road exemptions, requiring that the supplier collect and remit that tax. This would eliminate the possibility of fraudulent deductions by suppliers.

Exemption Process

As previously stated in discussing evasion reduction, the use of exemption certificates and the requirement that claims be assigned do not favor fuel tax collection. In either a refund or an income tax credit process, persons claiming an exemption must provide sufficient evidence to the state to substantiate their exempt usage. The state need not provide the refund or the tax credit unless it is satisfied that the person has provided sufficient information and the claim is legitimate. The burden then falls on the purchaser claiming the exemption to demonstrate its validity to the state. While any such claim is pending or in doubt, the state has already collected the tax. Furthermore, since the purchaser is directly applying to the state for the exemption, they are less likely to attempt evasion. Finally, since the state now has all of the relevant information necessary to assess an exemption claim, the state has the information it needs to audit persons claiming exemptions.

Audit Process

The state has insufficient information under current law to effectively audit off-road fuel tax exemption usage. While it has sufficient information to audit the deductions taken by suppliers, it does not have sufficient information to efficiently examine and verify the actual exemption claims. A refund or tax credit process would permit the state to collect the information to approve or reject off-road exemption claims as well as to follow-up during the period permitted in the statute of limitations to audit heavy users of exemption claims.

Marine Use of Dyed Diesel

Wisconsin law presently provides conflicting provisions relating to whether or not it intends to tax fuel used in motorboats. In one provision, it prohibits motorboats from claiming an exemption for off-road usage of fuel in motorboats. This suggests that Wisconsin intends its fuel tax to be imposed. However, it permits the use of dyed diesel for off-road uses in which an exemption may not be claimed. This provision permits the use of dyed diesel in motorboats, contradicting the express provision that the usage of clear diesel in motorboats is subject to Wisconsin fuel tax. This contradiction should be eliminated. If a motorboat is not permitted to an exemption from fuel tax for use in a motorboat, it should not be permitted to evade the tax by using dyed fuel.

Summary and Conclusions

There are a number of opportunities to reduce evasion and increase fuel tax collections through improvements to Wisconsin law concerning off-road fuel tax exemptions. These changes do not affect the substantive policy assessment of what uses should or should not be exempt. Each of the policy options has been implemented in one or more Border States or Other Midwestern States. Through a combination of these policy options, Wisconsin can bring greater efficiency to implementation of its fuel tax policies.

Amend Statutory Language and Legal Presumptions – Specifically, current statutes should be amended to include the presumption that motor vehicle fuel will only be used or consumed by motor vehicles operating on the roads of the state. Lawmakers should also consider closing the loophole that permits operators of out-of-state boats, many of whom are not entitled to tax refunds, to purchase dyed diesel fuel.

Modify Administrative Processes – By changing the process of collecting fuel taxes, a great deal of evasion can be eliminated. A number of changes to fuel tax rebate and refund processes are suggested. In particular, the current policy of providing exemption certificates should be replaced by a refund permit process or income tax credit for exempt consumers. It is also suggested that the state deduct any outstanding income or sales taxes from motor fuel tax refunds or credits. Such changes are known to facilitate more accurate auditing, which ultimately improves compliance rates.

Collect New Information – The audit process can be made tremendously more effective by collecting additional information from current and future fuel tax exemption claimants. This new information can be used to improve the speed and efficiency with which potential evaders are audited.

Enhance Criminal Penalties – This report suggests two changes to the criminal penalties associated with fuel tax evasion. First, criminal fuel tax evasion should be made a felony. At the same time, the fines and other civil penalties associated with repeat violators should be enhanced. Lawmakers should also consider a specific fine for refusal to permit an inspection or audit, and severe penalties for failure to keep required records.

Reference List

1. *Anderson's Ohio Revised Code 2001*,
<http://onlinedocs.andersonpublishing.com/revisedcode/>.
2. *Illinois Compiled Statutes 2001, Revenue, Motor Fuel Tax Law, 35 ILCS 505/*;
<http://www.legis.state.il.us/ilcs/ch35/>.
3. *Indiana Code 2001, Chapter 1.1 Gasoline Tax and Chapter 2.5 Special Fuel Tax*;
<http://www.in.gov/legislative/ic/code/title6/> Office of Code Revision Indiana
Legislative Services Agency.
4. *Iowa Code 2001, Chapter 452A*, <http://itr1.state.ia.us>; *Iowa Code 2001: Sections 714.9 through 714.14*, <http://www.legis.state.ia.us/IACODE/2001/>.
5. *Kansas Statutes 2001, Chapter 79, Article 34 Motor Vehicle Fuel Taxes*,
<http://www.kslegislature.org/cgi-bin/statutes>.
6. *Michigan Compiled Laws, Motor Fuel Tax Act, Act 403 of 2000*,
<http://www.michiganlegislature.org/law/>.
7. *Minnesota Statutes 2001, Chapter 296A*,
<http://www.revisor.leg.state.mn.us/stats/296A/>.
8. *Missouri Revised Statutes 2001, Chapter 142, Motor Fuel Tax*,
<http://www.moga.state.mo.us/statutes/chapters/chap142.htm>.
9. *Nebraska Revised Statutes 2001, Chapter 66*,
<http://statutes.unicam.state.ne.us/corpus/chapall/chap66.html>.
10. *1999-2000 Wisconsin Statutes, Chapter 78, Unofficial Text*,
<http://folio.legis.state.wi.us/>.

Appendix A

Additional Statistical Analysis Results

Table A1: Correlation Coefficients Monthly Gasoline Refunds								
	Agrimonth	Fuel tax	Farm	Acreage	Industrial	Indusval	Marine	Watercom
Agrimonth	1.00							
Fuel tax	0.23****	1.00						
Farm	0.27****	0.11**	1.00					
Acreage	-0.02	-0.11**	-0.11**	1.00				
Industrial	-0.04	0.07	-0.20****	-0.31****	1.00			
Indusval	-0.22****	0.07	-0.23****	-0.43****	0.56****	1.00		
Marine	-0.21****	0.26****	-0.14****	0.18****	0.27****	0.17****	1.00	
Watercom	-0.14****	-0.15****	0.34****	-0.28****	0.28****	0.66****	0.08*	1.00
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05								

- Correlation coefficients represent the strength and direction (positive or inverse) of the relationship between the two variables.

- The p-value is a statistical significance test. That is, for each of these variables, there exists less than a 5% chance (p-value<.05; or 1%, .1%, or .01%, as indicated by the number of asterisks) that the relationship between these variables is due to chance error or a “spurious relationship.” In essence, the correlation is not due to some extraneous or intervening factor.

Table A2: Simple Statistics Monthly Gasoline Refunds			
Variable	N	Mean	Std Dev
Agrimonth	756	1,039,843	1,295,511
Fuel tax	756	19.10	2.85
Farm	756	6,584	1,354
Acreage	756	320.10	158.03
Industmonth	756	854,937	1,177,138
Indusval	648	14,382	7,963
Marine	756	188,908	398,674
Watercom	756	5,187	4,690

- The mean is synonymous with “average.” In this case, the mean score for each of these variables were calculated by adding the values of those variables for each state, and dividing by the number of states.

- Standard deviation refers to the distance from the mean. That is, the difference between the mean score for that variable, and the actual score. A high standard deviation implies that the values are widely distributed, where low standard deviations indicate that the data are “clustered” at certain points. Examining the Acreage variable, forexample, the mean for all claims is 320 acres with a standard deviation of 158.03 acres.

Table A3: Midwestern State's Monthly Agriculture Gasoline Refunds		
Variable	OLS Estimate	AR (2) Estimate
Intercept	-2,636,247***	-2,625,339*
Fuel tax	-99,057****	-98,846**
Farm	750.68****	748.39***
Acreage	1,350.96****	1,348***
Illinois	166,786	167,839
Iowa	460,227	464,321
Michigan	1,310,572****	1,306,779***
Missouri	-2,120,817****	-2,113,269**
Minnesota before 1998	1,055,958****	1,058,206****
Minnesota after 1998	-854,442****	-854,554***
Wisconsin	1,684,770****	1,684,511****
R-Square	33.40%	35.00%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05		

- The results should be interpreted in the following manner: a one-unit increase in each independent variable results in the reported estimated impact on the dependent variable (the total gallons of tax exempt gasoline refunds per month). For example, a \$0.01 increase in the fuel tax rate is expected to decrease total exempt gasoline refunds by 99,057 gallons per month, and so forth.

- The p-value is a statistical significance test similar to that described above.

- The R-Square statistic refers to the total statistical model's accuracy in predicting the values of the dependent variable. The R-Squares of 33.40% for the OLS estimates, and 35% for the AR2 estimates indicate that the statistical models explain 33.4% and 35%, respectively, of the variance in the actual values for the dependent variable. While there exists no specified rule or guideline for a "good" or "acceptable" R-Square score, comparative results from analyses similar to these show that this model is a reasonably good estimator.

Table A4: Border State's Monthly Agriculture Gasoline Refunds		
Variable	OLS Estimate	AR (2) Estimate
Intercept	-1,278,039**	-1153017
Fuel tax	-6,333	-20507
Farm	851.25****	857.90****
Acreage	-9,102.82***	-8803**
Wisconsin	-386569	-276774
Minnesota before 1998	856661**	897761**
Minnesota after 1998	-957512****	-921122**
R-Square	25.11%	21.68%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05		

Table A5: Correlation Coefficients for Annual Gasoline Refunds								
	Agriculture	Fuel tax	Farms	Acreage	Industrial	Indusva lue	Marine	Wcommerce
Agriculture	1.00							
Fuel tax	0.41***	1.00						
Farms	0.40**	0.16	1.00					
Acreage	-0.03	-0.05	-0.11	1.00				
Industrial	-0.24	-0.11	-0.13	-0.34**	1.00			
Indusvalue	-0.34	-0.06	-0.23	-0.43**	0.52****	1.00		
Marine	-0.16	0.19	-0.17	-0.53****	0.52****	0.51****	1.00	
Wcommerce	-0.22	-0.22	0.36**	-0.29*	0.36**	0.69****	0.12	1.00
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05								

Table A6: Simple Statistics for Annual Gasoline Refunds			
Variable	N	Mean	Std Dev
Agriculture	63	12,504	10,523
Fueltax	63	19.94	3.08
Farms	63	79,008	16,362
Acreage	63	320.10	159.19
Industrial	63	10,361	6,671
Indusvalue	54	172,413	96,344
Marine	63	24,041	15,010
Wcommerce	63	62,239	54,340

Table A7: Midwestern State's Annual Agriculture Gasoline Refunds		
Variable	OLS Estimate	AR (2) Estimate
Intercept	-3,364.81	-1,834
Fuel tax	390.58	125.99
Farms	-0.0051	0.04
Acreage	4.37	5.43
Wisconsin	15,808****	16,594****
Michigan	2,429.29	4,018
Iowa	23,332****	22,298**
Missouri	6,070.72	4,352
Minnesota after 1998	-5,618.37**	-7,116
Minnesota before 1998	18,924*	18,741****
Illinois	7,709.21***	7,251*
R-Square	69.22%	78.48%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05		

Table A8: Midwestern State's Monthly Industrial Gasoline Refunds		
Variable	OLS Estimate	AR (1) Estimate
Intercept	-2415854****	-2433799****
Fuel tax	121560****	122907****
Indusval	79.36****	78.60****
Wisconsin	-894,511****	-901,982****
Michigan	1,072,773****	1,081,236****
Iowa	77,252	84,237
Missouri	-50,832	-42,250
Minnesota before 1998	-825,455****	-823,612****
Minnesota after 1998	-1,009,391****	-1,013,300****
Illinois	-828,603****	-817,610****
R-Square	50.13%	43.52%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05		

Table A9: Border State's Monthly Industrial Gasoline Refunds		
Variable	OLS Estimate	AR (1) Estimate
Intercept	6,259,742****	6,250,434****
Fuel tax	-284,643****	-283,350****
Industval	22.87**	22.07**
Wisconsin	796,827**	784,272**
Minnesota before 1998	-800,379****	-810,374****
Minnesota after 1998	-853,393****	-860,263****
R-Square	39.67%	35.87%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05		

Table A10: Midwestern State's Annual Industrial Gasoline Refunds		
Variable	OLS Estimate	AR (2) Estimate
Intercept	2,517	3,571
Fuel tax	106.29	53.86
Indusvalue	0.0242**	0.0234*
Wisconsin	-1,905	-1,609
Michigan	11,533****	11,362****
Iowa	-1,153	-935.02
Missouri	8,617**	8,553***
Minnesota after 1998	-1,379*	-1,390
Minnesota before 1998	-3,010	-2,921
Illinois	1,247	1,471
R-Square	65.27%	71.98%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05		

Table A11: Border State's Annual Marine Gasoline Usage	
Variable	OLS Estimate
Intercept	-302,888***
Fuel tax	583.40
Wcommerce	0.018
Boats	24,502****
Wisconsin	-10,334
Minnesota after 1998	-7729.50
Minnesota before 1998	-7706.06
R-Square	60.86%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05	

Table A12: Midwestern State's Annual Marine Gasoline Usage		
Variable	OLS Estimate	AR (1) Estimate
Intercept	-299,027**	-278,700*
Fuel tax	772.86**	832.28
Wcommerce	-0.601	-0.039
Boats	24,929*	23,067*
Wisconsin	-23,254	-20,812
Michigan	-11,348	-8,130
Iowa	-11,046**	-10,615*
Minnesota after 1998	-18,788	-15,538
Minnesota before 1998	-19,511	-16,535
Illinois	489.99	-619.36
R-Square	75.45%	79.67%
**** p-value < .0001 *** p-value < .001 ** p-value < .01 * p-value < .05		

Appendix B

Motor Fuel Tax Law Comparisons

Table B1: Motor Fuel Tax Rates and Collection Point		
State	Motor Fuel Tax Rate per gallon	Collected at the Terminal?
Wisconsin	28.1¢	No, suppliers pay tax monthly based on amount withdrawn from the terminal in the prior month.
Border States		
Illinois	Motor fuel—19¢; Diesel—21.5¢	No, suppliers and distributors pay tax monthly.
Iowa	Gasoline—20¢; Undyed diesel or kerosene—22.5¢	No, suppliers pay tax monthly based on amount withdrawn from the terminal in the prior month.
Michigan	Gasoline—19¢; Diesel—15¢	Yes, gasoline is taxed at the time of removal, and diesel is split with 9¢ paid at removal and 6¢ paid by person who sells to the consumer.
Minnesota	E85—14.2¢; M85—11.4¢; Other (diesel and gas)—20¢	Yes.
Other Midwestern States		
Indiana	Gasoline—15¢; Special ⁷⁷ —16¢	Yes, except licensed distributors report and pay gasoline tax monthly, licensed suppliers of special fuel pay tax monthly.
Kansas ⁷⁸	Motor fuel—21¢; Special ⁷⁹ —23¢; LP gas—20¢	Yes, except first sale to a licensed distributor.
Missouri	17¢	No, except that importers pay tax within 3 days of import. Others pay the 2 nd day of the 2 nd month following withdrawal from the terminal.
Nebraska	24.5¢	Yes, although tax liability may be transferred one time to a licensed motor vehicle fuels supplier, distributor or wholesaler.
Ohio	22¢	Yes, except sales between licensed motor fuel dealers, then the purchaser reports and pays tax.

⁷⁷ Includes diesel fuel.

⁷⁸ Rates in effect July 1, 2001 until July 1, 2003. From July 1, 2003 until July 1, 2020, rates increase 1¢ per gallon.

⁷⁹ Includes diesel fuel.

Table B2: Statutory Presumptions of Taxable Use of Motor Fuel	
State	Presumption of Taxable Use of Motor Fuel
Wisconsin	None. ⁸⁰
Border States	
Illinois	None.
Iowa	Implicit presumption: Iowa imposes excise tax upon the use of all motor fuel (in Iowa) <i>for any purpose except as otherwise provided</i> in division 452A.
Michigan	(1) An irrebuttable presumption that all motor fuel placed in the supply tank of a licensed motor vehicle is to be used to propel motor vehicles on Michigan's public roads except as provided in specific exemption sections of the law; and (2) a rebuttable presumption (subject to proof of exemption) that motor fuel removed from a terminal in Michigan or imported into Michigan will be used to propel motor vehicles on Michigan's public roads.
Minnesota	Presumes that gasoline (other than aviation or marine gasoline) is intended for use in motor vehicles in Minnesota.
Other Midwestern States	
Indiana	A rebuttable presumption that all undyed or unmarked special fuel received in Indiana is to be sold for use in propelling motor vehicles. However, there is no presumption regarding the use of gasoline.
Kansas	None.
Missouri	Presumption that all motor fuel delivered in Missouri into a motor vehicle fuel supply tank is to be used or consumed on the highways in Missouri to propel motor vehicles.
Nebraska	None.
Ohio	All undyed diesel fuel, regardless of its use, is considered as used to generate power to operate motor vehicles upon Ohio public highways or waters within the boundaries of the state when sold to a person other than a licensed motor fuel dealer or licensed exporter.

⁸⁰ For the purpose of enforcing the motor fuels tax law, Wisconsin law presumes that alternate fuels (Wis. Stat. §78.53) and aviation fuel (Wis. Stat. §78.61) are used for taxable purposes.

Table B3: Gasoline Exemptions for Off-Road Usage			
State	Mobile Machinery & Equipment	Aircraft	Other Off-Road Uses (Describe)
Wisconsin	Exempt over 100 gallons delivered to tank.	Exempt over 100 gallons delivered to tank. Subject to separate tax.	Motor vehicle fuel for a purpose other than operating a motor vehicle on the public highways if 100 gallons or more, other than snowmobile, aircraft, recreational motorboat, or all-terrain vehicle not registered for a private use.
Border States			
Illinois	See Other.	Exempt, except tax on receivers of fuel.	Motor fuel used for any purpose other than operating a motor vehicle on the public highways or waters.
Iowa	Machinery and equipment used for non-highway purposes.		Unlicensed vehicles, stationary engines, implements used in agricultural production. Fuel used for producing denatured alcohol. Rules apply to exempt fuel for idle time, for power takeoffs, reefer units, pumping credits and transport diversions. Licensed commercial fisher. Used other than on a public highway in extraction and processing of natural deposits.
Michigan	See Other.	Subject to separate tax.	Non-highway purposes other than snowmobile, off-road vehicle or vessel. Non-highway industrial uses. Implements of husbandry.
Minnesota ⁸¹	Exempts motor vehicles having 3 or more axles with a permanently mounted corn sheller, feed grinder, back hoe, crane, well-drilling machine or other similar equipment & traveling only to transport the special equipment.	Partial refund. Supplemental certificate required.	Gasoline sold for storage in an on-farm bulk storage tank. Partial refunds are permitted for specific vehicles with power takes-off or auxiliary engines according to a schedule. Commissioner may permit refunds for other uses consistent with the statutes. Agricultural vehicles are excluded from the definition of motor vehicles used on the highways.

⁸¹ Minnesota law allocates certain amounts to special funds based upon assumed use for motorboats, snowmobiles, all-terrain vehicles, off-highway motorcycles. See Exhibit A-1 for list of partial refunds for machinery and equipment.

Table B3 Continued: Gasoline Exemptions for Off-Road Usage			
State	Mobile Machinery & Equipment	Aircraft	Other Off-Road Uses (Describe)
Other Midwestern States			
Indiana	Refund is available for gasoline used to operate equipment mounted on motor vehicles. ⁸²	Exempt to a permit holder. Gasoline used in aircraft is subject to a refund.	A permit holder may purchase gasoline tax exempt to use in motorboats. Refunds are available for gasoline used for stationary gas engines, tractor used for agricultural purposes, implements of husbandry, motorboats, cleaning or dyeing, other commercial use except propelling motor vehicles on public highways.
Kansas	See Other.	Exempt.	Use of motor vehicle fuel for any purpose other than operating motor vehicles on the public highway may obtain a refund if the amount of the refund exceeds \$25.
Missouri	That portion of motor fuel used to operate equipment attached to a motor vehicle is exempt.	Kerosene used in aircraft is exempt.	Motor fuel used for nonhighway purposes including fuel for farm tractors or stationary engines or operated exclusively for agricultural purposes. Operating vehicles not designed for highway use from one location to another over public highways is not considered operation on the public highways.
Nebraska		See Other.	Agriculture, quarrying, industrial or other nonhighway uses are exempt. Dyed diesel fuel may not be placed into the supply tank of a motor vehicle (except government vehicles).
Ohio	See Other.	Exempt.	For motor fuel other than gasoline and clear diesel fuel sold for use other than operating motor vehicles on public highways or waters within Ohio. ⁸³ Refund available for: (1) fuel used to operate or propel stationary gas engines, tractors used for off-highway purposes; unlicensed motor vehicles used exclusively intraplant operations; (2) Vessels used entirely for commercial purposes; vessels used in Boy Scout training; vessels used or owned by railroad car ferry companies; and (3) fuel used for cleaning or dyeing.

⁸² See Exhibit A-2 for partial refunds available for machinery and equipment.

⁸³ Ohio Department of Taxation indicated that they use Indiana's partial refund schedule (Exhibit A-2) as a reference in determining gallons of off road fuel used in power take off equipment.

Table B4: Diesel Exemptions for Off-Road Usage			
State	Heating Oil	Trains	Other Off-Road Uses (Describe)
Wisconsin	Exempt.	Exempt.	Dyed diesel fuel sold for off-road uses (other than snowmobile, ATVs not registered for private usage or recreational motorboat) or if no refund claim may be made for off-road use of undyed diesel. Motor vehicle fuel for a purpose other than operating a motor vehicle on the public highways if 100 gallons or more, other than snowmobile, aircraft, recreational motorboat, or all-terrain vehicle not registered for a private use.
Border States			
Illinois	See Other.	See Other.	Motor fuel used for any purpose other than operating a motor vehicle on the public highways or waters. Undyed diesel used in: manufacturing if dyed diesel results in an unsuitable product; research and development; agricultural fertilizers implement; refrigeration equipment mounted on a semi-trailer; power take-off equipment.
Iowa			Unlicensed vehicles, stationary engines, implements used in agricultural production. Fuel used for producing denatured alcohol. Rules apply to exempt fuel for idle time, for power takeoffs, reefer units, pumping credits and transport diversions. Licensed commercial fisher. Used other than on a public highway in extraction and processing of natural deposits . Undyed special fuel used in watercraft.
Michigan	See Other.	See Other.	Non-highway purposes other than snowmobile, off-road vehicle or vessel. Non-highway industrial uses. Implements of husbandry. Dyed diesel fuel may be used in a pleasure boat, but the tax must be paid on the marina's return. Undyed diesel may be sold for exempt purposes in amounts less than 100 gallons.
Minnesota	Exempt.		Partial refunds are permitted for specific vehicles with power takes-off or auxiliary engines according to a schedule. Commissioner may permit refunds for other uses consistent with the statutes.

Table B4 Continued: Diesel Exemptions for Off-Road Usage			
State	Heating Oil	Trains	Other Off-Road Uses (Describe)
Other Midwestern States			
Indiana	Dyed special fuel used as heating oil is exempt. If undyed, may obtain a refund.	Dyed special fuel used in trains is exempt. If undyed, may obtain a refund.	Dyed special fuel used for nonhighway purposes is exempt. If undyed, may obtain a refund.
Kansas	See Other.	See Other.	Dyed special fuel used only for nonhighway purposes. Use of special fuel for any purpose other than operating motor vehicles on the public highway may obtain a refund if the amount of the refund exceeds \$25.
Missouri	Diesel used as heating oil is exempt.	Diesel used in trains is exempt.	Diesel used for nonhighway purposes not otherwise exempted Motor fuel used for nonhighway purposes including fuel for farm tractors or stationary engines or operated exclusively for agricultural purposes. Undyed kerosene sold at retail through dispensers constructed to prevent delivery into a vehicle supply tank. Dyed diesel fuel or kerosene used for an exempt purpose. Operating vehicles not designed for highway use from one location to another over public highways is not considered operation on the public highways.
Nebraska	See Other.	See Other.	Undyed diesel 50 gallons or less may be sold exempt with an exemption certificate if purchased for use in temperature control units or power takeoff units (includes certain agricultural equipment) & placed into a separate supply tank that is not connected to the main fuel supply of a motor vehicle. Agriculture, quarrying, industrial or other nonhighway uses are exempt. Dyed diesel fuel may not be placed into the supply tank of a motor vehicle (except government vehicles).
Ohio	See Other.	See Other.	For motor fuel other than gasoline and clear diesel fuel sold for use other than operating motor vehicles on public highways or waters within Ohio. ⁸⁴ Refund available for: (1) fuel used to operate or propel stationary gas engines, tractors used for off-highway purposes; unlicensed motor vehicles used exclusively intraplant operations; (2) Vessels used entirely for commercial purposes; vessels used in Boy Scout training; vessels used or owned by railroad car ferry companies; and (3) fuel used for cleaning or dyeing.

⁸⁴ Ohio Department of Taxation indicated that they use Indiana's partial refund schedule (Exhibit A-2) as a reference in determining gallons of off road fuel used in power take off equipment.

Table B5: Refund Processes		
State	Separate Processes for Gas and Diesel?	Refund Process
Wisconsin	No.	Most exempt purchases are not taxed—purchaser submits an exemption certificate to the supplier. Persons who paid tax may claim a refund if the claim exceeds 100 gallons.
Border States		
Illinois	No, separate calculations for undyed diesel (limited to use by a commercial vehicle for an off-road purpose) & gasoline claims.	Refund may be claimed within 2 years of the date the tax was paid for purchases on or after Jan.1, 2000. Any allowed credit or refund bears interest as provided in the Uniform Penalty and Interest Act.
Iowa	No, but fuel types are listed separately.	Persons seeking refunds must first apply for a permit. Credit must be at least \$60 in a given year and the refund claim filed within 1 year of purchase. Most refund claims may then be submitted over the telephone using a password. However, if the person claims a credit against income tax, no refund permit is required.
Michigan	No, although different forms may be required.	Purchase is presumed taxable. Purchasers may file a refund claim if it meets an exemption. Refund claims must be filed within 18 months of purchase for fuel purchased on or after April 1, 2001 (12 months for fuel purchased before that date). However, undyed diesel fuel in amounts of less than 100 gallons may be sold tax-free for an exempt purpose. The department pays interest on a refund claim in accordance with their statutes.
Minnesota	No. Form has separate columns for gas & diesel.	Invoices must meet state requirements. Claims may be filed monthly, and must be received within 60 days of the end of the claimant's accounting year. Erroneous refunds are tax underpayments. Taxpayer bears the burden of proving an assessment by the commissioner is invalid or incorrect.
Other Midwestern States		
Indiana	Yes, separate statutes & separate forms.	Licensed distributor may claim a deduction on the report for the month of sale for sales to exemption permit holders. Refunds are available for other nonhighway uses listed in the statute.
Kansas	No.	Must obtain a refund permit. Claim must exceed \$25. Claim must be filed within 1 year from the date of purchase. Refund claim to be processed within 20 days of receipt.
Missouri	No, there are separate columns on the form for gas & diesel.	Refund may be claimed only by consumer within 1 year of date of purchase or by April 15 of the following year. If refund is not paid within 30 days of an accurate and complete filing, interest accrues on and after the 30 th day.
Nebraska	Yes, separate statutes.	Refund permitted only for fuels destroyed or for overpayment of taxes. For tax paid on fuel not used on the highway, purchaser may take a refund credit on Nebraska income tax. If a credit exceeded \$60,000 in the prior year, the person may file monthly tax credit claim. Not allowed on less than 40 gallons. Equipment in which gas was used must have been included in the claimant's personal tax list for the preceding year.
Ohio	No, although there are different forms for industrial and agricultural use.	Refund shall be issued to person filing a claim based upon nonhighway use if filed within one year from the date of purchase, not fewer than 100 gallons. Person must have an unrevoked vendee's refund permit. Commissioner may require an affidavit in support of an application. Right to a refund is not assignable. Interest is allowed if refund is for illegal or erroneous assessment.

Table B6: Information Collected for Refund (Includes Refund Permit Information Where Applicable)										
	Border States					Other Midwestern States				
Information Collected to Process Refund Claim⁸⁵	WI	IL	IA	MI	MN	IN	KS	MO	NE	OH
Claimant's name	X	X	X	X	X	X	X	X	X	X
Mailing address (or only one line for address)	X	X	X	X	X		X	X	X	X
Location address			X		X		X	X	X	X
Dates of purchase (or period for which refund is claimed)	X	X	X	X	X	X			X	
Type of activity	X				X			X	X	
Fuel storage (Highway use tank/Non Highway use tank)				X			X	X	X	
Claim type number			X							
Fuel type number			X							
Type of organization	X		X				X		X	X
Original invoices	X	⁸⁶	X	X	X		X ⁸⁷	X	X	X
Calculation of refund	X	X	X	X	X		X	X	X	X
Average fuel cost										X
Sales or use tax subtracted from refund								X	X	X
Highway usage by miles and gallons		X								X
Description of how fuel was used		X						X	X	X
Equipment description	X	X		X	X		X	X	X	X
Declaration, certification or attestation	X	X	X	X	X		X	X ⁸⁸	X	
Claim is made under penalty of perjury						X				X
Signature, telephone, date	X	X	X	X	X		X		X	X
Signature and address of preparer if other than claimant				X					X	
Permit/license number		X	X				X			X
State Id number					X				X	
Sales tax due or whether subject to sales tax			X					X		X
Refundable Use Report										X
Additional information as required			X							

⁸⁵ Information may be submitted as permit application or refund claim.

⁸⁶ Submitted only when requested.

⁸⁷ If original is lost or destroyed, a statement to that effect and the date of delivery, serial number of the invoice, number of gallons, and name of the distributor or retailer.

⁸⁸ No certification on Form 4924, Motor Fuel Refund Application, there is one on Form 4923, Motor Fuel Refund Claim.

Table B7: Form of Reimbursement for Exempt Transaction	
State	Form of Reimbursement for Exempt Transaction
Wisconsin	Deduction to licensed supplier. Other claimants are sent refund checks.
Border States	
Illinois	Refund or credit memorandum. However, refunds may be made only from appropriations available for that purpose. The department may provide for cash refunds in hardship cases where appropriations are unavailable.
Iowa	Income tax credit or direct deposit.
Michigan	Licensees may claim a deduction in lieu of a refund.
Minnesota	Credit or refund. Money is appropriated for refunds by statute.
Other Midwestern States	
Indiana	Deduction to supplier for sale to exemption permit holder. All receipts of the motor fuel fund are available for payment of refunds.
Kansas	By warrant processed within 10 days after certification by director of amount due, mailed with 30 days of receipt of the claim. Refunds are paid out of a revolving fund set aside for that purpose.
Missouri	Supplier takes a deduction for dyed diesel whenever claim exceeds \$1,000.
Nebraska	Gasoline is not subject to refund, but is allowable as a refundable credit against purchaser's income tax liability. Exempt use of undyed diesel is subject to refund within 3 years of the date of payment of the tax. No refund may be less than \$2.
Ohio	State may apply the refund in full or partial satisfaction of any Ohio tax debt that has become final.

Table B8: Penalties for Exemption Violation		
State	Criminal Penalty	Civil Penalty
Wisconsin	\$500 or 6 mos., or both.	Greater of \$1,000 or twice the amount of the tax, plus interest on the tax from the date due until paid at 1.5% per month. Personal liability to persons who sign or abet a false or fraudulent report.
Border States		
Illinois	Evasion of tax, false return or report is a Class 2 felony. False documentation is a Class 4 felony.	Erroneous refunds assessments are limited to the amount of the erroneous refund
Iowa	It is a fraudulent practice to: maintain false, incorrect or materially incomplete records required to be kept, refusal to provide required books and records for inspection, or refusal to permit inspection of tanks and equipment, alteration of invoices used to support refund claim, use of untaxed fuel in a vehicle. There are 5 degrees of fraudulent practice based upon the amount of money involved in the fraud: 1 st >\$10,000—Class C felony; 2 nd >\$1,000 to \$10,000—Class D felony; 3 rd >\$500 to \$1,000—Aggravated misdemeanor; 4 th >\$200 to \$500—Serious misdemeanor; and 5 th not >\$200—Simple misdemeanor. Two or more acts may be totaled as a single fraudulent penalty to determine the penalty. Personal liability attaches to persons, including officers or managers, who make or aid and abet in making false or fraudulent reports, returns or false statements with the intent to evade tax.	Improper receipt of refund—penalty of 10% added to the amount of the tax. If made with fraudulent intent to evade tax—75% penalty. Excess refunds bear interest at statutory rate. Prevention of inspection—civil penalty of \$1,000 per occurrence.
Michigan	False statement, altered invoice, or wrongfully collecting a refund is a misdemeanor punishable by a fine of not more than \$1,000, or 1 year in prison or both. Failure or refusal to pay tax is a felony. Refusal to permit an inspection for the purpose of evading tax is a felony.	Refusal to permit an inspection or audit is subject to a civil penalty of \$5,000, plus tax and interest.
Minnesota	False information is a gross misdemeanor. Willful evasion is a felony. Use of a vehicle with untaxed fuel on a public highway is a misdemeanor. Any other violation is a gross misdemeanor.	Forfeit the full amount of the claim. Prohibits any refund claims on fuel purchased for 6 months after the conviction. Unpaid tax bears a penalty of 1% for the first 10 days, and thereafter bears interest.

Table B8 Continued: Penalties for Exemption Violation		
State	Criminal Penalty	Civil Penalty
Other Midwestern States		
Indiana	Refund statement given under penalty of perjury. False statement in connection with a gasoline tax refund is a Class B infraction. False or duplicate claims for the same invoice is a Class B misdemeanor. Failing to keep adequate books and records is a Class B misdemeanor. Knowingly using gasoline on which tax was not paid is a Class B misdemeanor. However, violations with intent to evade tax and defraud the state is a Class D felony. Fraudulently withholding special fuels tax is a Class D felony.	False or fraudulent special fuels tax return subject to a civil penalty equal to the tax evaded. Negligent disregard of any provision of the special fuel chapter is subject to a civil penalty of \$500 for each separate occurrence.
Kansas	Failure to pay motor fuel taxes, failure to keep required records, use of fuels purchased as exempt in a taxable manner, is a misdemeanor, subject to a fine not < \$1,000 nor >\$10,000, or jail for not < 30 days nor > one year, or both; second or subsequent conviction, fine not < \$5,000 nor >\$50,000, or jail for not < 60 days nor > 2 years, or both. Filing false or forged application, refund claim, altered invoice, or aiding and abetting a violation is a severity level 10, nonperson felony.	Refund permit is canceled for any false statement on a permit application or refund claim. Director may maintain a civil action for return of illegal refund. Director may suspend or revoke any license issued to a person in violation of felony provisions and may impose an administrative penalty of \$10 per gallon, or not <\$1,000 nor >\$10,000, and for second or subsequent violation, a penalty of \$25 per gallon, or not <\$5,000 nor >\$50,000.
Missouri	Misdemeanor to violate the chapter, but if done with intent to evade tax, it is a Class D felony. Fraudulently filing, withholding or appropriating tax money is the crime of stealing.	Tax not paid bears a penalty of 5% of the amount of the tax per month up to 25%, plus interest. Filing a false or fraudulent return with intent to evade tax bears a penalty of 50% of the amount of the deficiency, plus interest. License revocation. Civil penalty of \$100 for 1 st violation plus \$100 for each additional violation.
Nebraska		Knowingly filing a false report or return—penalty in the amount of the greater of 100% of the tax or \$1,000, in addition to other remedies. License suspension.
Ohio	Knowingly collecting or attempting to collect a refund if not entitled to the refund: Misdemeanor of the 1 st degree if tax not >\$500. If >\$500 but not >\$10,000 it is a felony of the 4 th degree; for each subsequent offense >\$500 but not >\$10,000 it is a felony of the 3 rd degree. If >\$10,000 it is a felony of the 2 nd degree.	Refund permit revocation with no reinstatement for one year.

Table B9: Penalties for Misuse of Dyed Diesel			
State	State Tax Exempt?	Criminal Penalty for Misuse of Dyed Diesel	Civil Penalty for Misuse of Dyed Diesel
Wisconsin	Yes.	\$500 or 6 mos., or both.	Greater of \$1,000 or twice the amount of the tax. Dept of Transportation may seize and sell any motor vehicle fuel and vehicle for operating or maintaining a motor vehicle (other than an agricultural vehicle) on any highway in the state with dyed fuel.
Border States			
Illinois	Yes. ⁸⁹	Knowingly possessing dyed diesel fuel for highway use is a Class A misdemeanor; each subsequent offense is a Class 4 felony. Selling or attempting to sell dyed diesel fuel for highway use is a Class 4 felony for the 1st offense, and a Class 2 felony for each subsequent offense.	Operator of a motor vehicle or recreational watercraft with dyed diesel fuel in the ordinary tank is subject to a penalty of \$2,500 for the 1 st offense and \$5,000 for each subsequent offense.
Iowa	Yes.	Misuse of dyed fuel is a fraudulent practice. There are 5 degrees of fraudulent practice based upon the amount of money involved in the fraud: 1 st >\$10,000—Class C felony; 2 nd >\$1,000 to \$10,000—Class D felony; 3 rd >\$500 to \$1,000—Aggravated misdemeanor; 4 th >\$200 to \$500—Serious misdemeanor; and 5 th not >\$200—Simple misdemeanor. Two or more acts may be totaled as a single fraudulent penalty to determine the penalty.	Illegal use of undyed fuel: 1 st -\$200 fine, \$500 if 2 nd is within 3 years, \$1,000 for 3 rd and subsequent within 3 years of 1 st .
Michigan	Yes. ⁹⁰	No criminal penalty.	Vehicle: \$200 for 1 st 2 violations in 12-month period, and \$5,000 thereafter. Motor vehicle: civil penalty from IRC §6714. Mixed dyed and undyed fuel is taxed as undyed.
Minnesota	Yes.	Use of a vehicle with untaxed fuel on a public highway is a misdemeanor.	Greater of \$1,000, or \$10 per gallon. Enhanced penalty for multiple violations, multiplying the penalty amount by the number of prior penalties imposed. Personal joint and several liability of officer, employee or agent. Is in addition to other penalties for non-payment of tax.

⁸⁹ If it is unintentionally mixed with undyed, the person can claim a refund.

⁹⁰ Use is prohibited on the public roads.

Table B9 Continued: Penalties for Misuse of Dyed Diesel (continued)			
State	State Tax Exempt?	Criminal Penalty for Misuse of Dyed Diesel	Civil Penalty for Misuse of Dyed Diesel
Other Midwestern States			
Indiana	Yes. ⁹¹	Violating the prohibition on using dyed fuel on a public highway, or aiding and abetting a violation, is a class A infraction. It is a Class A misdemeanor if the person has committed 1 prior unrelated violation of this section and a Class D felony if the person has committed more than 1 prior unrelated violation. Knowingly manipulating dye concentration in a special fuel or aiding and abetting a violation is a Class D felony.	Persons consuming dyed fuel for a nonexempt purpose are required to file a monthly report. Operator of a vehicle on the public highways using dyed fuel is subject to a civil penalty of \$200 for the first occurrence, \$2,500 for the second occurrence, and \$5,000 for each subsequent occurrence.
Kansas	Yes.	Selling or holding dyed fuel that the person knows or has reason to know that it will not be used for a nontaxable purpose is a misdemeanor, subject to a fine not < \$1,000 nor >\$10,000, or jail for not < 30 days nor > one year, or both; second or subsequent conviction, fine not < \$5,000 nor >\$50,000, or jail for not < 60 days nor > 2 years, or both. Use of dyed fuel other than for a nontaxable use, or willful alteration of strength or composition of any dye, or aiding and abetting a violation is a severity level 10, nonperson felony.	Director may collect the tax for dyed special fuel used on the highways, and the seller is jointly and severally liable if seller knew or had reason to know that the fuel would be used on the public highways. Director may suspend or revoke any license issued to a person in violation of felony provisions and may impose an administrative penalty of \$10 per gallon, or not <\$1,000 nor >\$10,000, and for second or subsequent violation, a penalty of \$25 per gallon, or not <\$5,000 nor >\$50,000.
Missouri	Yes.	Class A misdemeanor to violate or aid and abet a violation. Incorporates the personal liability of officer or agent under IRC §6715.	
Nebraska	Yes. ⁹²		Administrative penalty of \$1,000 per violation. License suspension.
Ohio	Yes.		Penalty of the greater of \$1,000 or \$10 per gallon for selling or distributing dyed fuel when the person knows or has reason to know it will be used for a taxable use. Consuming dyed fuel for a taxable purpose –penalty of \$1,000 or \$10 per gallon of capacity of the fuel tank, whichever is greater. For subsequent violations, the penalty is multiplied by the number of prior penalties assessed.

⁹¹ A person that inadvertently manipulates the dye or marker concentration must report it to the department of revenue within 1 business day.

⁹² Except that Nebraska governmental entities and public school districts pay state tax on dyed diesel.

Table B10: Auditing Processes		
State	Audit Statutes	Relief for Refusal
Wisconsin	Department of Revenue may examine books, records, papers, receipts, invoices, storage tanks and equipment of any licensee, broker, dealer or purchaser.	May ask a court to compel cooperation.
Border States		
Illinois	Any duly authorized agent or employee of the Department of Revenue may enter in or upon the premises of any manufacturer, vendor, dealer, retailer, distributor, receiver, supplier or user of motor fuel or special fuels during regular business hours to examine books, records, invoices, storage tanks, and any other applicable equipment pertaining to motor fuel, aviation fuels, home heating oils, kerosene, or special fuels, to determine whether or not tax has been paid. Inspections must be performed in a reasonable manner and at reasonable times. They may physically inspect, examine, or search tanks, reservoirs, or containers. They may take samples.	\$1,000 penalty for each refusal to allow an inspection, in addition to other penalties. Licensees who refuse inspection are subject to license revocation.
Iowa	Department of Revenue or Transportation, as applicable, may examine the records, books, papers, receipts, invoices, storage tanks, and any other equipment of a distributor, supplier, restrictive supplier, importer, exporter, blender, terminal operator, common carrier or contract carrier, an interstate operator of motor vehicles, or any person selling fuels that can be used for highway use. In addition, they may examine records, books, papers, receipts, and invoices of any distributor, etc. or user, or any other person who possesses fuel upon which tax has not been paid. Information is to be kept confidential.	May be found in s.422 incorporated by reference administration, taxes, penalties, interest and costs.
Michigan	Department of Revenue may audit and examine records, books, papers, and equipment of any person, including without limitation, terminal operators, suppliers, importers, wholesalers, jobbers, retail dealers, bulk end users, fuel vendors, all private and common carriers of motor fuel. General authority for sampling inspections without prior notice. Established motor fuel tax evasion prevention fund.	Civil penalty of \$5,000, in addition to other penalties. Refusal to allow an inspection for the purpose of evading tax is a felony, in addition to other penalties.
Minnesota	Commissioner may make reasonable examinations or investigations of a taxpayer's place of business, tangible personal property, equipment, computer systems and facilities, pertinent books, records, papers, vouchers, computer printouts, accounts and documents. May examine (except where privileged by law) relevant records and files of any person, business, institution, government or agency of any other state where permitted. Commissioner has subpoena power and power to compel testimony. Taxpayer must pay cost of production of third-party records.	In addition to other remedies, an action in equity for an injunction ordering the taxpayer to file a complete or amended return. Disobedience with subpoena or injunction is punishable as contempt.

Table B10 Continued: Auditing Processes		
State	Audit Statutes	Relief for Refusal
Other Midwestern States		
Indiana	Department of revenue has the power to audit and investigate under its general duties, powers and responsibilities rather than specifically under the excise tax statutes. These powers include the power to subpoena evidence and witnesses.	May enforce audit and investigatory powers in court.
Kansas	Director of taxation designates auditors who check distributors, retailers, refund permit holders or any person who uses, stores, transports, sells or delivers fuels. Has authority to administer oaths, issue subpoenas, and compel the attendance of witnesses and the production of books, papers, accounts, documents and testimony. Examination by any deputy or agent appointed by the director to examine books, papers, records, storage tanks and other equipment during reasonable business hours.	Refusal to comply with subpoena is subject to contempt proceedings.
Missouri	Director of Revenue, his agents or appointees, federal agents under a contract with the state may inspect & remove samples of fuel. Inspections must be conducted in a reasonable manner, without prior notice. May inspect tanks, reservoirs, containers, equipment used in production storing or transporting of fuel. May audit & examine records, books, papers & equipment of licensee or other person selling, transporting, storing or using motor fuel.	Civil penalty of \$5,000 for refusal to permit inspection or audit in addition to other penalties. Refusal to permit inspection is a misdemeanor, but if the purpose was to defraud, it is a Class D felony.
Nebraska	Any law enforcement officer, carrier enforcement officer, or agent of the Dept of Taxation who has reasonable grounds to suspect a violation may inspect fuel supply tank of a motor vehicle or fuel storage facilities. Inspection may also be conducted in the course of a safety or other inspection. Dept of Taxation may receive assistance from any member of the Nebraska State Patrol, police officer, county attorney or the Attorney General in enforcing the motor fuel tax law. Employees of the department may stop & inspect vehicles, inspect premises & temporarily impound motor vehicles or motor vehicle fuel to administer the act.	Refusal to permit an inspection is a Class IV misdemeanor. Subsequent refusal within 5 years bears an administrative penalty of \$2,000, and \$2,500 for any subsequent refusal.
Ohio	Tax Commissioner or employees may examine dealers, retailers & purchasers books, records and papers. They may take testimony, issue subpoenas, compel attendance of witnesses & conduct investigations.	Refusal is a misdemeanor of the 4 th degree.